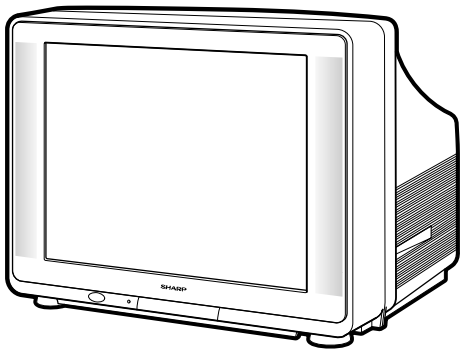
SHARP SERVICE MANUAL

S61W527R-FS1/



COLOR TELEVISION

Chassis No. V01A

MODEL 27R-FS1

In the interests of user-safety (Required by safety regulations in some countries) the set should be restored to its original condition and only parts identical to those specified should be used.

CONTENTS

Page

- ELECTRICAL SPECIFICATIONS 1
- IMPORTANT SERVICE SAFETY PRECAUTION 2
- LOCATION OF USER'S CONTROL 4
- INSTALLATION AND SERVICE INSTRUCTIONS 5
- CHASSIS LAYOUT 12
- BLOCK DIAGRAM 14
- SCHEMATIC DIAGRAMS 16
- PRINTED WIRING BOARD ASSEMBLIES 28
- REPLACEMENT PARTS LIST 34
- PACKING OF THE SET 47

ELECTRICAL SPECIFICATIONS

POWER INPUT ..... 120V AC 60 Hz
POWER RATING 134W
PICTURE SIZE ..... 1,240cm^2 (192.2sq inch)
CONVERGENCE ..... Magnetic
SWEEP DEFLECTION ..... Magnetic
FOCUS ..... Hi-Bi-Potential Electrostatic
INTERMEDIATE FREQUENCIES
  Picture IF Carrier Frequency ..... 45.75 MHz
  Sound IF Carrier Frequency ..... 41.25 MHz
  Color Sub-Carrier Frequency ..... 42.17 MHz (Nominal)
AUDIO POWER
  OUTPUT RATING ..... 5W + 5W (at 10% distortion and Dual CH Operate)
SPEAKER
  SIZE ..... 10 cm (2 pcs.)
  VOICE COIL IMPEDANCE ..... 8 ohm at 400 Hz
ANTENNA INPUT IMPEDANCE
  VHF/UHF ..... 75 ohm Unbalanced
TUNING RANGES
  VHF-Channels ..... 2 thru 13
  UHF-Channels ..... 14 thru 69
  CATV Channels ..... 1 thru 125 (EIA, Channel Plan U.S.A.)

Specifications are subject to change without prior notice.

SHARP CORPORATION

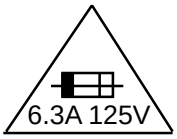
This document has been published to be used for after sales service only.
The contents are subject to change without notice.

IMPORTANT SERVICE SAFETY PRECAUTION

■ **Service work should be performed only by qualified service technicians who are thoroughly familiar with all safety checks and the servicing guidelines which follow:**

WARNING

1. For continued safety, no modification of any circuit should be attempted.
2. Disconnect AC power before servicing.
3. Semiconductor heat sinks are potential shock hazards when the chassis is operating.
4. The chassis in this receiver has two ground systems which are separated by insulating material. The non-isolated (hot) ground system is for the B+ voltage regulator circuit and the horizontal output circuit. The isolated ground system is for the low B+ DC voltages and the secondary circuit of the high voltage transformer.
   To prevent electrical shock use an isolation transformer between the line cord and power receptacle, when servicing this chassis.



CAUTION: FOR CONTINUED PROTECTION AGAINST A RISK OF FIRE, REPLACE ONLY WITH SAME TYPE 6.3A-125V FUSE.

SERVICING OF HIGH VOLTAGE SYSTEM AND PICTURE TUBE

When servicing the high voltage system, remove the static charge by connecting a 10k ohm resistor in series with an insulated wire (such as a test probe) between the picture tube ground and the anode lead. (AC line cord should be disconnected from AC outlet.)

1. Picture tube in this receiver employs integral implosion protection.
2. Replace with tube of the same type number for continued safety.
3. Do not lift picture tube by the neck.
4. Handle the picture tube only when wearing shatterproof goggles and after discharging the high voltage anode completely.

X-RADIATION AND HIGH VOLTAGE LIMITS

1. Be sure all service personnel are aware of the procedures and instructions covering X-radiation. The only potential source of X-ray in current solid state TV receivers is the picture tube. However, the picture tube does not emit measurable X-Ray radiation, if the high voltage is as specified in the "High Voltage Check" instructions.
   It is only when high voltage is excessive that X-radiation is capable of penetrating the shell of the picture tube including the lead in the glass material. The important precaution is to keep the high voltage below the maximum level specified.
2. It is essential that servicemen have available at all times an accurate high voltage meter.
   The calibration of this meter should be checked periodically.
3. High voltage should always be kept at the rated value –no higher. Operation at higher voltages may cause a failure of the picture tube or high voltage circuitry and;also, under certain conditions, may produce radiation in exceeding of desirable levels.
4. When the high voltage regulator is operating properly there is no possibility of an X-radiation problem. Every time a colour chassis is serviced, the brightness should be tested while monitoring the high voltage with a meter to be certain that the high voltage does not exceed the specified value and that it is regulating correctly.
5. Do not use a picture tube other than that specified or make unrecommended circuit modifications to the high voltage circuitry.
6. When trouble shooting and taking test measurements on a receiver with excessive high voltage, avoid being unnecessarily close to the receiver.
   Do not operate the receiver longer than is necessary to locate the cause of excessive voltage.

IMPORTANT SERVICE SAFETY PRECAUTION

(Continued)

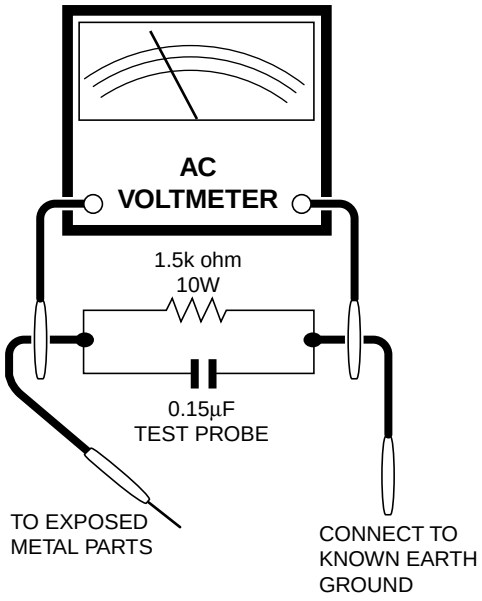
BEFORE RETURNING THE RECEIVER

(Fire & Shock Hazard)

Before returning the receiver to the user, perform the following safety checks.

1. Inspect all lead dress to make certain that leads are not pinched or that hardware is not lodged between the chassis and other metal parts in the receiver.
2. Inspect all protective devices such as non-metallic control knobs, insulating materials, cabinet backs, adjustment and compartment covers or shields, isolation resistor-capacity networks, mechanical insulators, etc.
3. To be sure that no shock hazard exists, check for leakage current in the following manner.

- Plug the AC cord directly into a 120 volt AC outlet, (Do not use an isolation transformer for this test).
- Using two clip leads, connect a 1.5k ohm, 10 watt resistor paralleled by a 0.15µF capacitor in series with all exposed metal cabinet parts and a known earth ground, such as electrical conduit or electrical ground connected to earth ground.
- Use an AC voltmeter having with 5000 ohm per volt, or higher, sensitivity to measure the AC voltage drop across the resistor.
- Connect the resistor connection to all exposed metal parts having a return to the chassis (antenna, metal cabinet, screw heads, knobs and control shafts, escutcheon, etc.) and measure the AC voltage drop across the resistor.
  AII checks must be repeated with the AC line cord plug connection reversed. (If necessary, a non-polarized adapter plug must be used only for the purpose of completing these check.)
  Any current measured must not exceed 0.5 milliamp. Any measurements not within the limits outlined above indicate of a potential shock hazard and corrective action must be taken before returning the instrument to the customer.



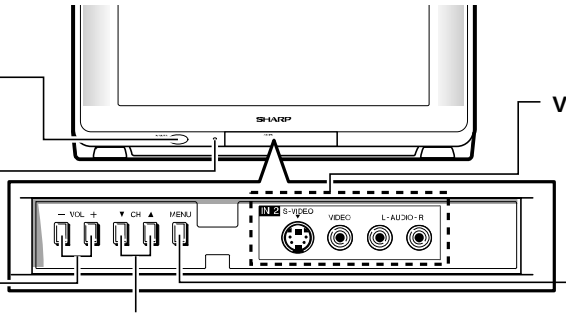
SAFETY NOTICE

Many electrical and mechanical parts in television receivers have special safety-related characteristics. These characteristics are often not evident from visual inspection, nor can protection afforded by them be necessarily increased by using replacement components rated for higher voltage, wattage, etc.
Replacement parts which have these special safety characteristics are identified in this manual; electrical components having such features are identified by "⚠" and shaded areas in the Replacement Parts Lists and Schematic Diagrams.

For continued protection, replacement parts must be identical to those used in the original circuit. The use of substitute replacement parts which do not have the same safety characteristics as the factory recommended replacement parts shown in this service manual, may create shock, fire, X-radiation or other hazards.

LOCATION OF USER'S CONTROL

Front Panel



POWER
Press → On.
Press again → Off.

SENSOR AREA FOR REMOTE CONTROL

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.

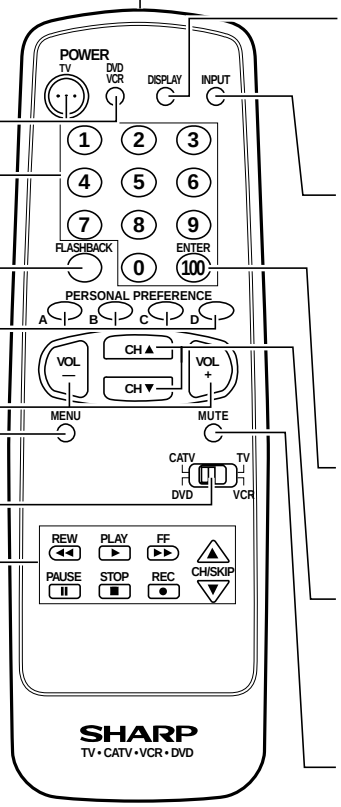
CHANNEL UP/DOWN
(▲) Selects next higher channel.
(▼) Selects next lower channel.

VIDEO/AUDIO IN 2 TERMINALS

(INSIDE DOOR)

MENU
Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

Basic Remote Control Functions



POWER
Press → On.
Press again → Off.

REMOTE KEYPAD
Accesses any channel from keypad.

FLASHBACK
Returns to previous channel.

PERSONAL PREFERENCE
With the Personal Preference buttons, you can program your favorite programs by using the 4 categories A, B, C and D. The channels can be accessed quickly by using these buttons.

VOLUME UP/DOWN
(+) Increases sound.
(–) Decreases sound.
- In menu mode, changes or selects the TV adjustments.

MENU
Press → Accesses MAIN MENU.
Press again → Exits MAIN MENU.

CATV/DVD-TV/VCR MODE SELECT SWITCH
In TV/VCR position, sends power and channel select commands (Channel up/down and Random Access buttons) to the TV and VCR control.
In CATV/DVD position, sends power and channel select commands to a cable TV converter and DVD control.

DVD/VCR CONTROL

Infrared Transmitter Window

DISPLAY
Press → Displays receiving channel for four seconds.
Press again → Removes display.
- Temporarily displays receiving channel when in Closed Caption mode.

INPUT
Press → Switch to external video INPUT 1 mode.
Press 2 times → Switch to external video INPUT 2 mode.
Press 3 times → Switch to external video INPUT 3 mode or COMPONENT mode.
Press 4 times → Switch back to the original TV mode.

ENTER
Used in some instances where a Cable Converter Box requires an "enter" command after selecting channels, when using the REMOTE KEYPAD button.

CHANNEL UP/DOWN
(▲) Selects next higher channel.
(▼) Selects next lower channel.
- Moves the "●" mark of the MENU screens.

MUTE
Press → Mutes sound.
Press again → Restores sound.
- CLOSED CAPTION appears when sound is muted.

Note:

- The above shaded buttons on the Remote Control glow in the dark. To use the glow-in-the-dark display on the remote control, place it under a fluorescent light or other lighting.
- The phosphorescent material contains no radioactive or toxic material, so it is safe to use.
- The degree of illumination will vary depending on the strength of lighting used.
- The degree of illumination will decrease with time and depending on the temperature.
- The time needed to charge the phosphorescent display will vary depending on the surrounding lighting.
- Sunlight and fluorescent lighting are the most effective when charging the display.

INSTALLATION AND SERVICE INSTRUCTIONS

Note: (1) When performing any adjustments to resistor controls and transformers use non-metallic screwdrivers or TV alignment tools.
(2) Before performing adjustments, the TV set must be on at least 15 minutes.

CIRCUIT PROTECTION

The receiver is protected by a 6.3A fuse (F701), mounted on PWB-C, wired into one side of the AC line input.

X-RADIATION PROTECTOR CIRCUIT TEST

After service has been performed on the horizontal deflection system, high voltage system, B+ system, test the X-Radiation protection circuit to ascertain proper operation as follows:

1. Apply 120V AC using a variac transformer for accurate input voltage.
2. Allow for warm up and adjust all customer controls for normal picture and sound.
3. Receive a good local channel.
4. Connect a digital voltmeter to TP653 and make sure that the voltmeter reads 11.10±0.9V.
5. Apply external 14.5V DC at TP653 by using an external DC supply, TV must be shut off.
6. To reset the protector, unplug the AC cord and plug the AC cord power on. Now make sure that normal picture appears on the screen.
7. If the operation of the horizontal oscillator does not stop in step 5, the circuit must be repaired before the set is returned to the customer.

HIGH VOLTAGE CHECK

High voltage is not adjustable but must be checked to verify that the receiver is operating within safe and efficient design limitations as specified. Checks should be as follows:

1. Connect an accurate high voltage meter between ground and anode of picture tube.
2. Operate receiver for at least 15 minutes at 120V AC line voltage, with a strong air signal or a properly tuned in test signal.
3. Enter the service mode and select the service No. "V10" and Bus data "01" (Y-mute on).
4. The voltage should be approximately, 32.0kV (at zero beam).
   If a correct reading cannot be obtained, check circuitry for malfunctioning components. After the voltage test, make Y-mute off to the normal mode.

For adjustments of this model, the bus data is converted to various analog signals by the D/A converter circuit.

Note: There are still a few analog adjustments in this series such as focus and master screen voltage. Follow the steps below whenever the service adjustment is required. See "Table-C" to determine, if service adjustments are required.

1. Service Mode

Before putting unit into the service mode, check that customer adjustments are in the normal mode. Use the reset function in the video adjustment menu to ensure customer controls are in their proper (reset) position.

2. Service Number Selection

Once in the service mode, press the Ch-up or Ch-down button on the remote controller or at the set. The service adjustment number will vary in increments of one, from "D01" to "OP05". Select the item you wish to adjust.

3. Data Number Selection

Press the Vol-up or down button to adjust the data number.

To enter the service mode and exit service mode.

While pressing the Vol-up and Ch-up buttons at the sametime, plug the AC cord into a wall socket.
Now the TV set is switched on and enters the service mode.
To exit the service mode, turn the television off by pressing the power button.

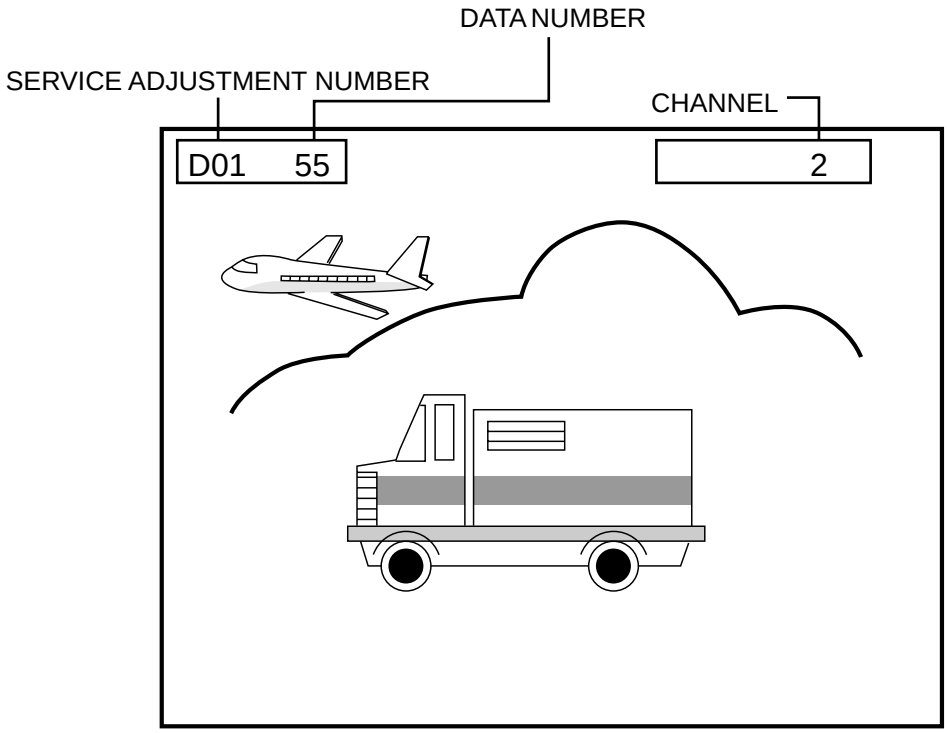


Figure A.

SERVICE NUMBER	ADJUSTMENT ITEM	DATA							ADJUSTMENT CONTENTS					
		RANGE	INITIAL VALUE											
			RF	VIDEO	COMPONENT	4:3	16:9	ZOOM	RF	VIDEO	COMPONENT	4:3	16:9	ZOOM
D01	PICTURE HEIGHT	00~63				30	19	37						
D02	V-LINEARITY	00~15				09	09	08						
D03	V-S CORRECTION	00~07				05	05	06						
D04	PICTURE WIDTH	00~63				45	45	36						
D05	E-W PARABOLA	00~31				13	08	18						
D06	E-W CORNER	00~15				05	05	02						
D07	TRAPEZIUM	00~15				07	07	07						
D08	V-POSITION	00~127				44	46	45						
D09	H-POSITION	00~31				21	21	21						
D10	UPER MASK END	01~63				01	14	15				Must be set to "01"	Must be set to "14"	Must be set to "15"
D11	LOWER MASK START	00~255				140	125	124				Must be set to "140"	Must be set to "125"	Must be set to "124"
D12	LEFT MASK END	01~127				65	65	80				Must be set to "65"	Must be set to "65"	Must be set to "80"
D13	RIGHT MASK START	00~127				117	117	108				Must be set to "117"	Must be set to "117"	Must be set to "108"
D14	OFFSET V-POSITION	00~100				50	50	50				Must be set to "50"	Must be set to "50"	Must be set to "50"
D15	OSD POSITION	00~31	25											
D16	OSD SL	00~31	00						Must be set to "00"					
V01	PICTURE	00~63	24	24	24									
V02	TINT	00~127	34	34	38									
V03	COLOR	00~127	36	36	44									
V04	BRIGHT	00~127	51	51	48									
V05	R CUT-OFF	00~255	64	64	64									
V06	G CUT-OFF	00~255	64	64	64									
V07	B CUT-OFF	00~255	64	64	64									
V08	G DRIVE	00~127	64	64	64									
V09	B DRIVE	00~127	64	64	64									
V10	Y-MUTE/V-OFF	00~01	00						Must be set to "00"					
V11	SHARPNESS OFFSET	20~83	55	55	55				Must be set to "55"	Must be set to "55"	Must be set to "60"			
V12	OFFSET PICTURE (SUB-CON)	40~55				52	48	53				Must be set to "52"	Must be set to "48"	Must be set to "53"
V13	OFFSET BRIGHT	00~100				50	51	55				Must be set to "50"	Must be set to "51"	Must be set to "55"
V14	SUB-CONTRAST	00~31	15	15	15				Must be set to "15"	Must be set to "15"	Must be set to "15"			
V15	OFFSET TINT (RF/VIDEO/COMPONENT)	20~70	51	51	51				Must be set to "51"	Must be set to "51"	Must be set to "51"			
V16	OFFSET TINT (S-VIDEO)	20~80			50						Must be set to "50"			
V17	BPF	00~01	01	00	00				Must be set to "01"	Must be set to "00"	Must be set to "00"			
V18	BLACK STRECH START POINT	00~07	06						Must be set to "06"					
V19	ABL POINT	00~03	00						Must be set to "00"					
V20	ABL GAIN	00~03	03						Must be set to "03"					
V21	ENERGY SAVE (ABL-CONT)	00~255	77						Must be set to "77"					
V22	ENERGY SAVE (SVM-CONT)	00~255	125						Must be set to "125"					
V23	ENERGY SAVE (BLACK LEVEL OFFSET)	00~100	52						Must be set to "52"					
V24	COLOR-γ	00~01	01						Must be set to "01"					
V25	RGB-γ	00~01	00						Must be set to "00"					
V26	COLOR TEMPARATURE, G DRIVE OFFSET HIGH 14,500°K	00~100	52						Must be set to "52"					
V27	COLOR TEMPARATURE, B DRIVE OFFSET HIGH 14,500°K	00~100	57						Must be set to "57"					
V28	COLOR TEMPARATURE, G DRIVE OFFSET ML 9,300°K	00~10	47						Must be set to "47"					

Table - A

SERVICE NUMBER	ADJUSTMENT ITEM	DATA							ADJUSTMENT CONTENTS					
		RANGE	INITIAL VALUE											
			RF	VIDEO	COMPONENT	4:3	16:9	ZOOM	RF	VIDEO	COMPONENT	4:3	16:9	ZOOM
V29	COLOR TEMPARATURE, B DRIVE OFFSET ML 9,300°K	00~100	40						Must be set to "40"					
V30	COLOR TEMPARATURE, G DRIVE OFFSET LOW 6,500°K	00~100	41						Must be set to "41"					
V31	COLOR TEMPARATURE, B DRIVE OFFSET LOW 6,500°K	00~100	24						Must be set to "24"					
V32	CHORMA RELATIVE PHASE/AMPLITUDE	00~03	00	00	00				Must be set to "00"	Must be set to "00"	Must be set to "00"			
M01	INPUT LEVEL (ATT)	00~15	09											
M02	MTS VCO	00~63	28											
M03	FILTER	00~63	28											
M04	WIDE BAND	00~63	18											
M05	SPECTRAL	00~63	38											
M06	FAO LEVEL	00~63	44											
OP01	V-CHIP	00~01	01						Must be set to "01"					
OP02	SCREEN FORMAT	00~01	01						Must be set to "01"					
OP03	DEMO MODE	00~01	01						Must be set to "01"					
OP04	ENGL/ESPA	00~01	01						Must be set to "01"					
OP05	SYNC FIX at NO SIGNAL	00~01	01						Must be set to "01"					

Table - A

■ SERVICE ADJUSTMENT

Screen Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service No. "V03" and set the data value to "00" to set the color level to minimum. (Record original data code under No. "V03" before changing) You may skip this step, if you selected a B/W picture or monoscope pattern.
3. Select the service No. "V10" and adjust the data value to "01", this turn off the luminance signal (Y-mute).
4. Select the service No. "V04" and adjust data value to "51".
5. Adjust the master screen control until the raster darkens to the point where raster is barely seen.
6. Adjust the service numbers "V05" red, "V06" green and "V07" blue to obtain a good grey scale with normal whites at low brightness level.
7. Select the service No. "V10" and reset data to "00". Select the service No. "V03" and reset data to obtain normal color level.
8. Reset the master screen control to obtain normal brightness range.

White Balance Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service No. "V03" and set to "00" (minimum color)(Record original data code under adjustment "V03" before changing). "V03" does not have to be adjusted, if you selected a B/W picture or monoscope pattern.
3. Alternately adjust the service numbers "V08" and "V09" until a good grey scale with normal whites is obtained.
4. Select the service No. "V03" and adjust data to obtain normal color level.

Sub-Picture Adjustment

1. Receive a good local channel.
2. Make sure the customer picture control is set to maximum.
3. Enter the service mode and select the service No. "V01".
4. Adjust the data value to achieve normal contrast range.

Sub-Tint Adjustment

1. Receive a good local channel.
2. Set customer tint control to center of it's range.
3. Enter the service mode and select the service No. "V02".
4. Adjust "V02" data value to obtain normal flesh tones.

Video-Tint Adjustment

1. Enter the service mode and select the service No. "V15".
2. Adjust "V15" data value to "V02" data value.

Sub-Color Adjustment

1. Receive a good local channel.
2. Make sure the customer color control is set to center position .
3. Enter the service mode and select the service No. "V03".
4. Adjust "V03" data value to obtain normal color level.

Sub-Brightness Adjustment

1. Receive a good local channel.
2. Make sure the customer brightness control is set to center position.
3. Enter the service mode and select the service No. "V04".
4. Adjust "V04" data value to obtain normal brightness level.

Vertical Linearity Adjustment

1. Receive a good CATV channel.
2. Set to standard setting mode.
3. Enter the service mode and select the service No. "D02".
4. While observing the top and bottom of the screen, adjust "D02" data value to proper vertical linearity.

Vertical Phase Adjustment

1. Enter the service mode and select the service No. "D08".
2. Adjust data value to "00".
   Note: This must be set "00" when changed data retrace line will appear.

Vertical-Size Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service No. "D01".
3. While observing the top and bottom of the screen, adjust "D01" data value to proper vertical size.

Side Pincushion Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Set to standard setting mode.
3. Enter the service mode and select the service No. "D05".
4. Adjust the data of service No. "D05" so that the outermost line on the screen be straight.

Horizontal Position Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Set to standard setting mode.
3. Enter the service mode and select the service No. "D09".
4. Adjust so that the left and right overscans are equal to each other.

Horizontal Size Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Set to standard setting mode.
3. Enter the service mode and select the service No. "D04".
4. Vary the data of service No. "D04" to obtain the best horizontal size.

Trapezoidal Distortion Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Set to standard setting mode.
3. Enter the service mode and select the service No. "D07".
4. Adjust so that the leftmost and rightmost vertical lines are parallel to each other.

Corner Distortion Adjustment

1. Receive a good CATV channel or crosshatch pattern signal.
2. Set to standard setting mode.
3. Enter the service mode and select the service No. "D06".
4. Adjust so that the vertical lines should be straight.

Caption Position Adjustment (Horizontal)

1. Receive a good local channel.
2. Enter the service mode and select the service No. "D15".
3. A black text box appears on the screen. (see **Figure B** below)
4. Adjust "D15" data value so that text box is positioned in the center of the screen.

Sharpness Adjustment

1. Receive a good local channel.
2. Enter the service mode and select the service No. "V11".
3. Adjust data value to "55" (center of data range).

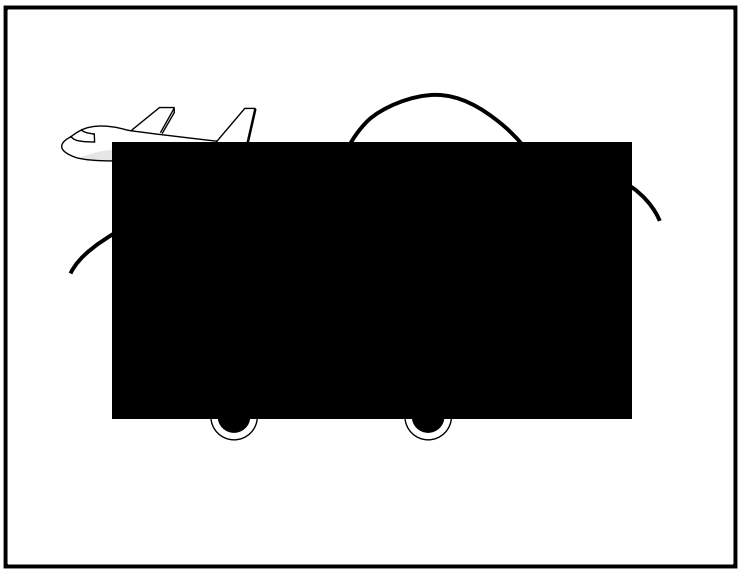


Figure B.

■ MTS ADJUSTMENT

MTS Level Adjustment

1. Feed the following monaural signal to pin (14) of IC3001.
   Monaural signal : 300Hz, 245mVrms
2. Connect the rms voltmeter to pin (39) of IC3001.
3. Enter the service mode and select the service No. "M01".
4. Adjust the data so that the rms voltmeter reads.
   Spec : 490 ±10mVrms.

MTS VCO Adjustment

1. Keep the unit in no-signal state.
2. Connect the frequency counter to pin (39) of IC3001.
3. Connect a capacitor (100µF, 50V) in between positive(+) side of C3005 and ground.
4. Enter the service mode and select the service No. "M02"
5. Adjust the data so that the frequency counter reads.
   Spec : 62.94 ±0.75kHz.

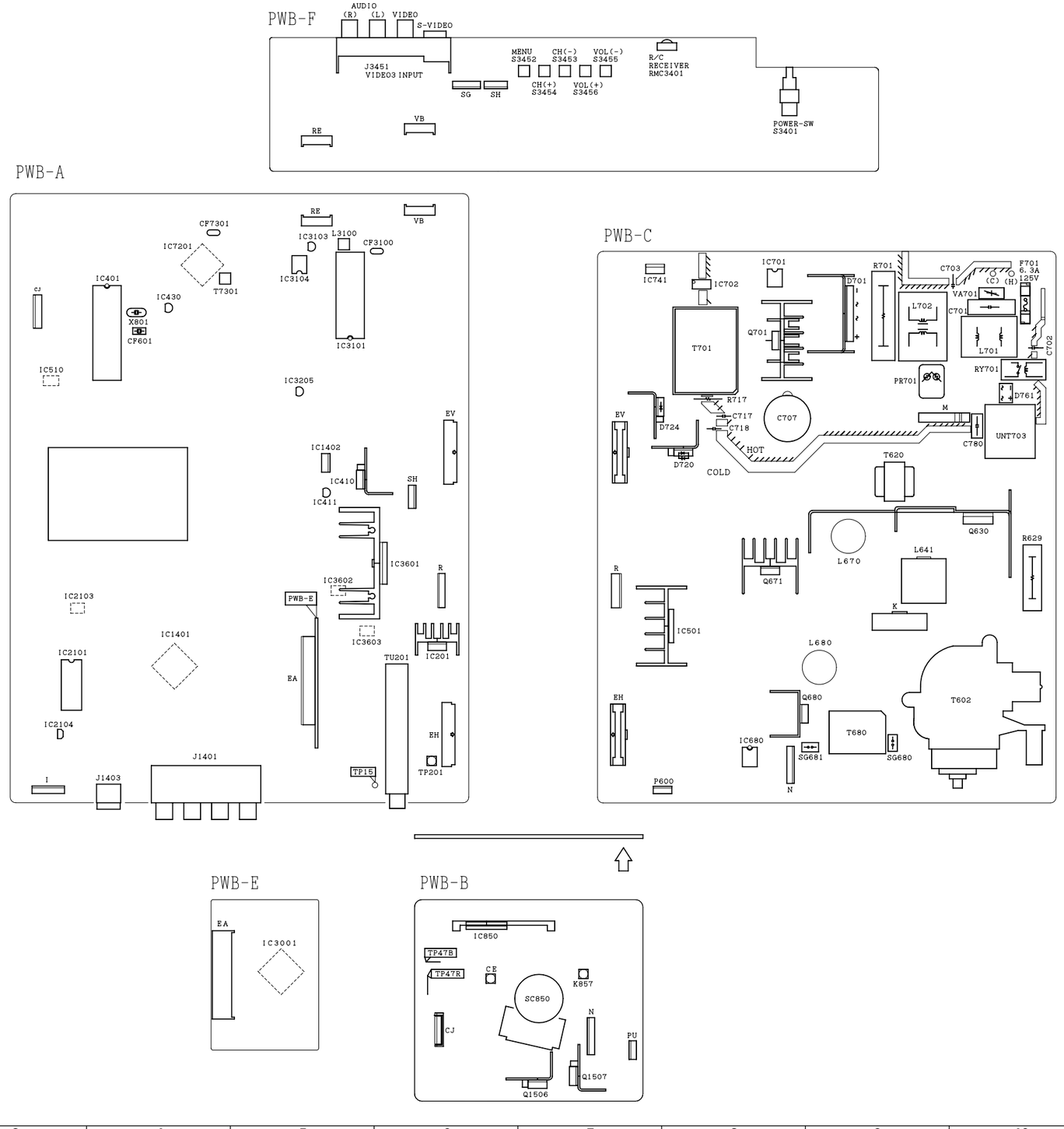
Filter Adjustment

1. Feed the following stereo pilot signal to pin (14) of IC3001 .
   Stereo pilot signal: 9.4kHz, 600mVrms.
2. Enter the service mode and select the service No. "M03".
3. Adjust the data until "OK" appears in position on the screen. Make sure the "OK" is displayed almost at the center of the data range.

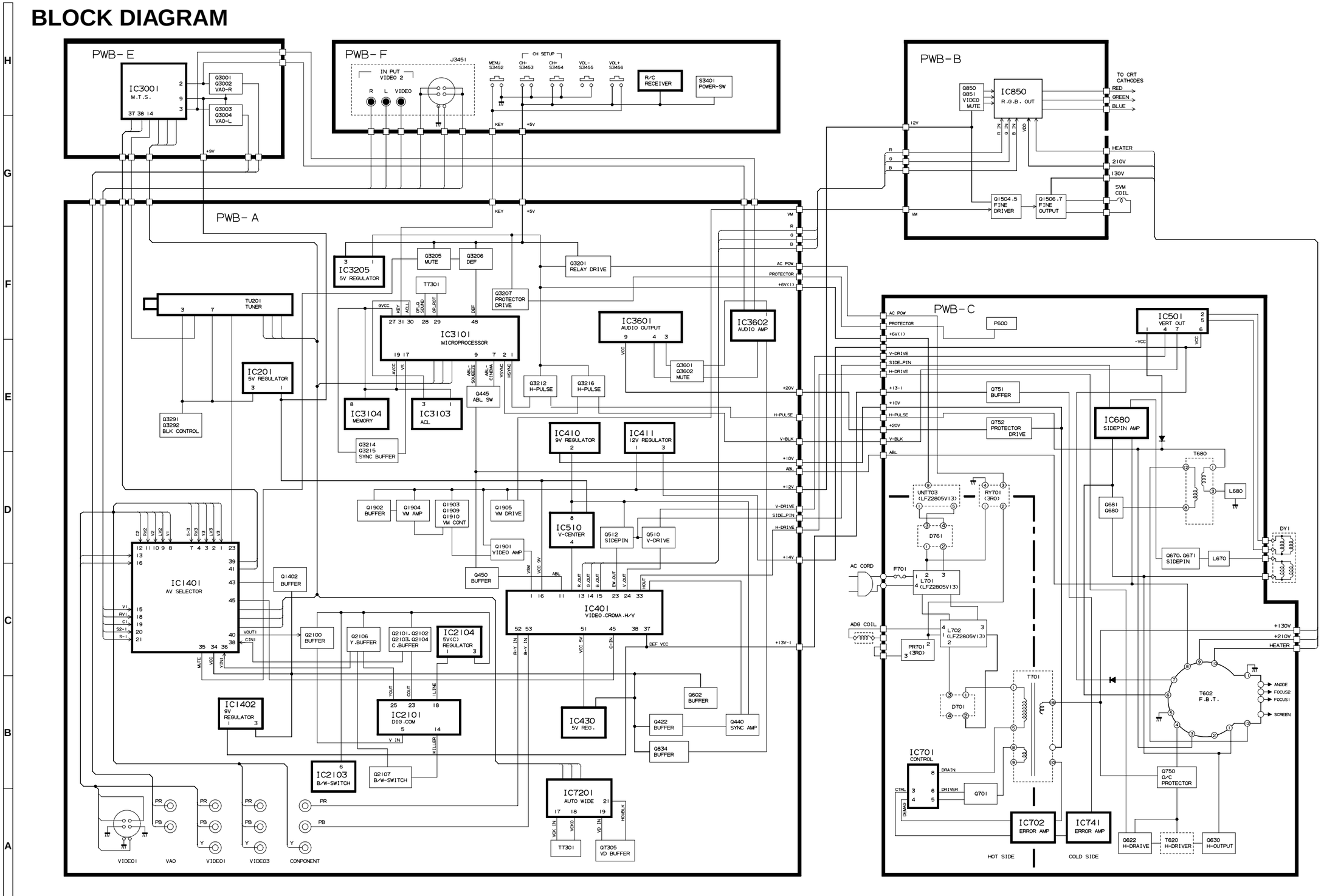
Separation Adjustment

1. Connect the rms voltmeter to pin (39) of IC3001.
2. Receive the following composite stereo signal 1.
   Composite stereo signal: 30% modulation, left channel only, noise reduction on, 300Hz
3. Enter the service mode and select the service No. "M04".
4. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
5. Receive the following composite stereo signal 2.
   Stereo signal: 30% modulation, left channel only, noise reduction on, 3kHz
6. Enter the service mode and select the service No. "M05".
7. Adjust the data until the AC voltage reading of the rms voltmeter is minimum.
8. Take the above steps 1 thru 7 again for fine adjustment.

CHASSIS LAYOUT



BLOCK DIAGRAM



DESCRIPTION OF SCHEMATIC DIAGRAM

NOTES:

1. *The unit of resistance "ohm" is omitted. (K=kΩ=1000Ω, M=MΩ)*
2. *All resistors are 1/16 watt, unless otherwise noted.*
3. *All capacitors are μ F, unless otherwise noted. (P=pF=μμF)*
4. *(G) indicates ±2% tolerance may be used.*
5. *⏚ indicates line isolated ground.*

VOLTAGE MEASUREMENT CONDITIONS:

1. *All DC voltages are measured with DVM connected between points indicated and chassis ground, line voltage set at 120V AC and all controls set for normal picture unless otherwise indicated.*
2. *All voltages measured with 1000μ V B & W or Color signal.*

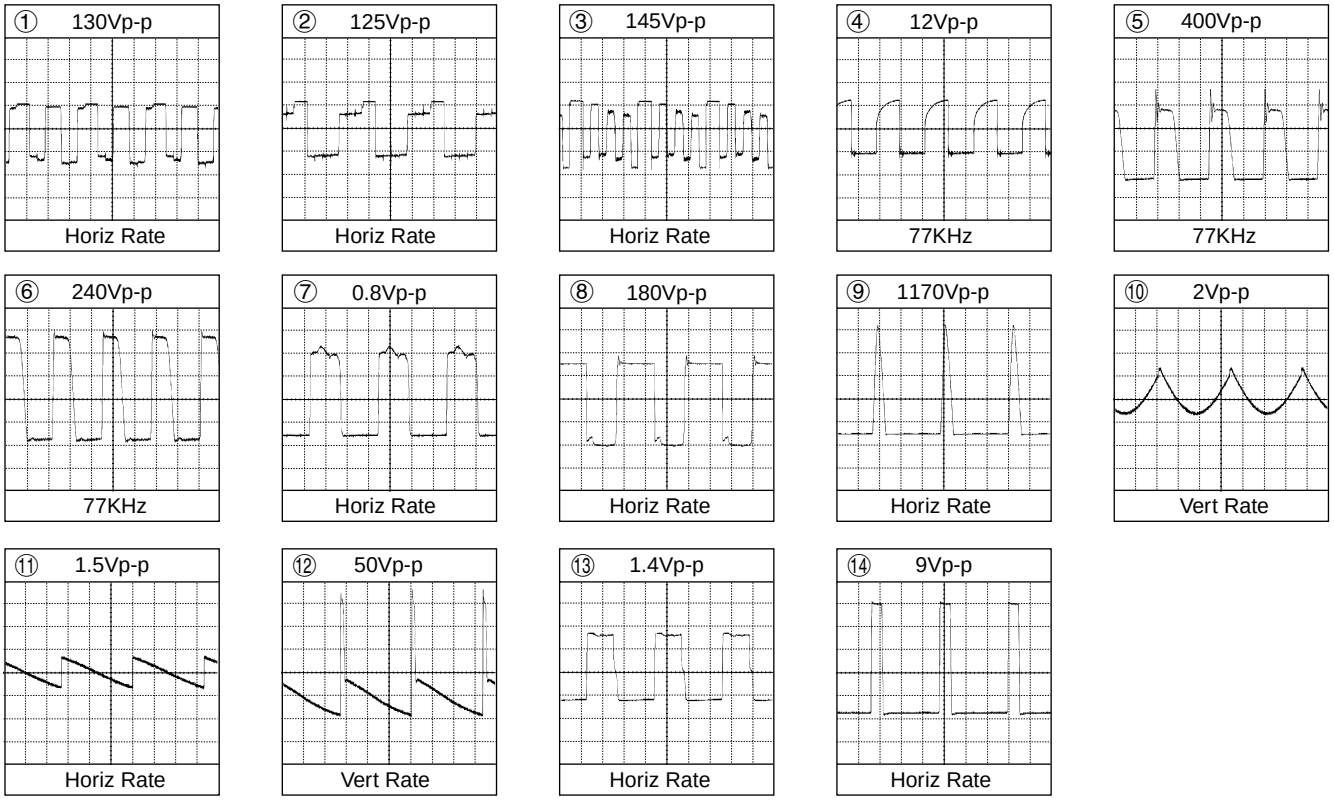
WAVEFORM MEASUREMENT CONDITIONS:

1. *Photographs taken on a standard gated color bar signal, the tint setting adjusted for proper color. The wave shapes at the red, green and blue cathodes of the picture tube depend on the tint, color level and picture control.*
2. *◯▶ indicates waveform check points (See chart, waveforms are measured from point indicated to chassis ground.)*

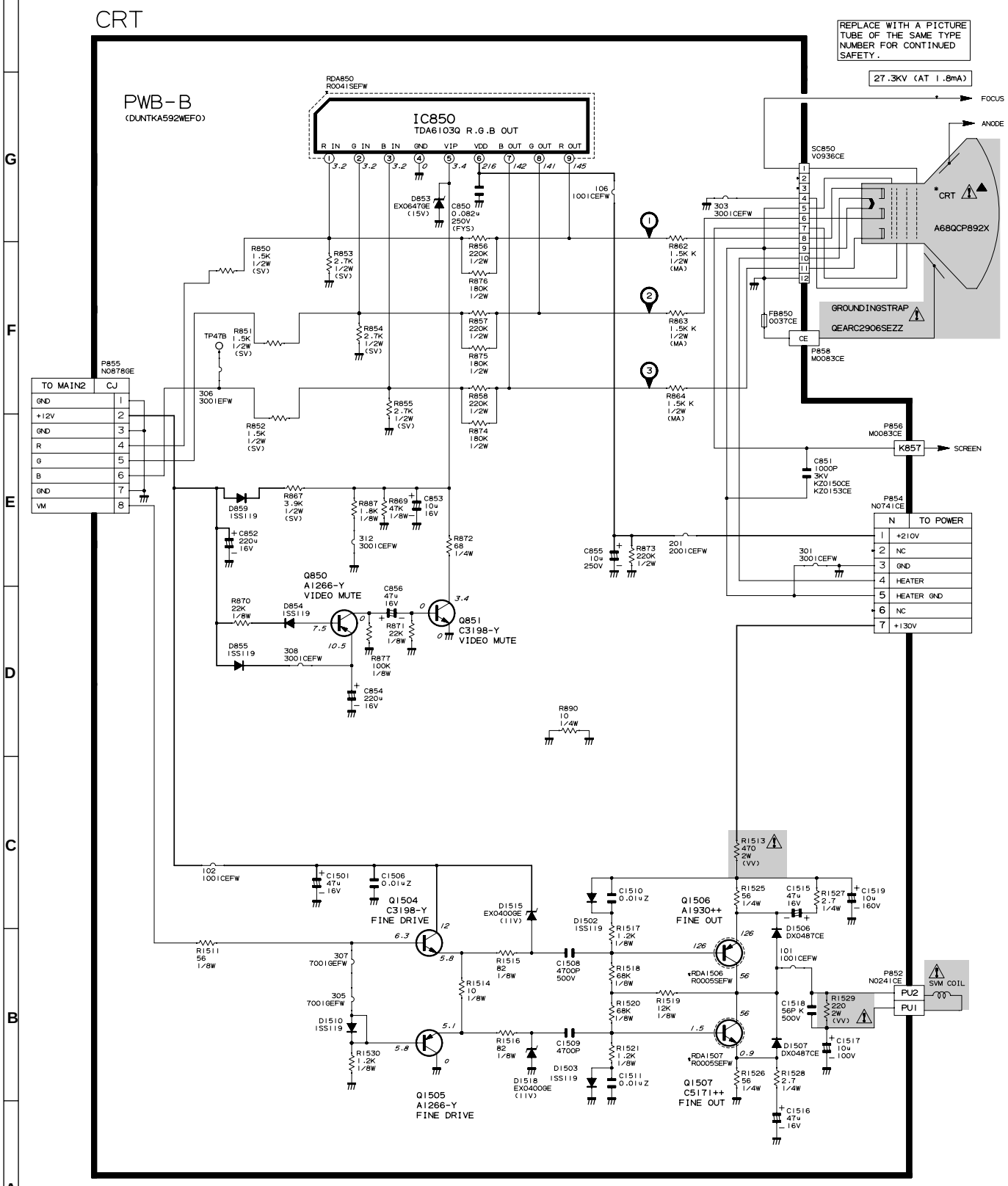
⚠ AND SHADED ( ) COMPONENTS = SAFETY RELATED PARTS.
▲ MARK= X-RAY RELATED PARTS.

This circuit diagram is a standard one, printed circuits may be subject to change for product improvement without prior notice.

WAVEFORMS

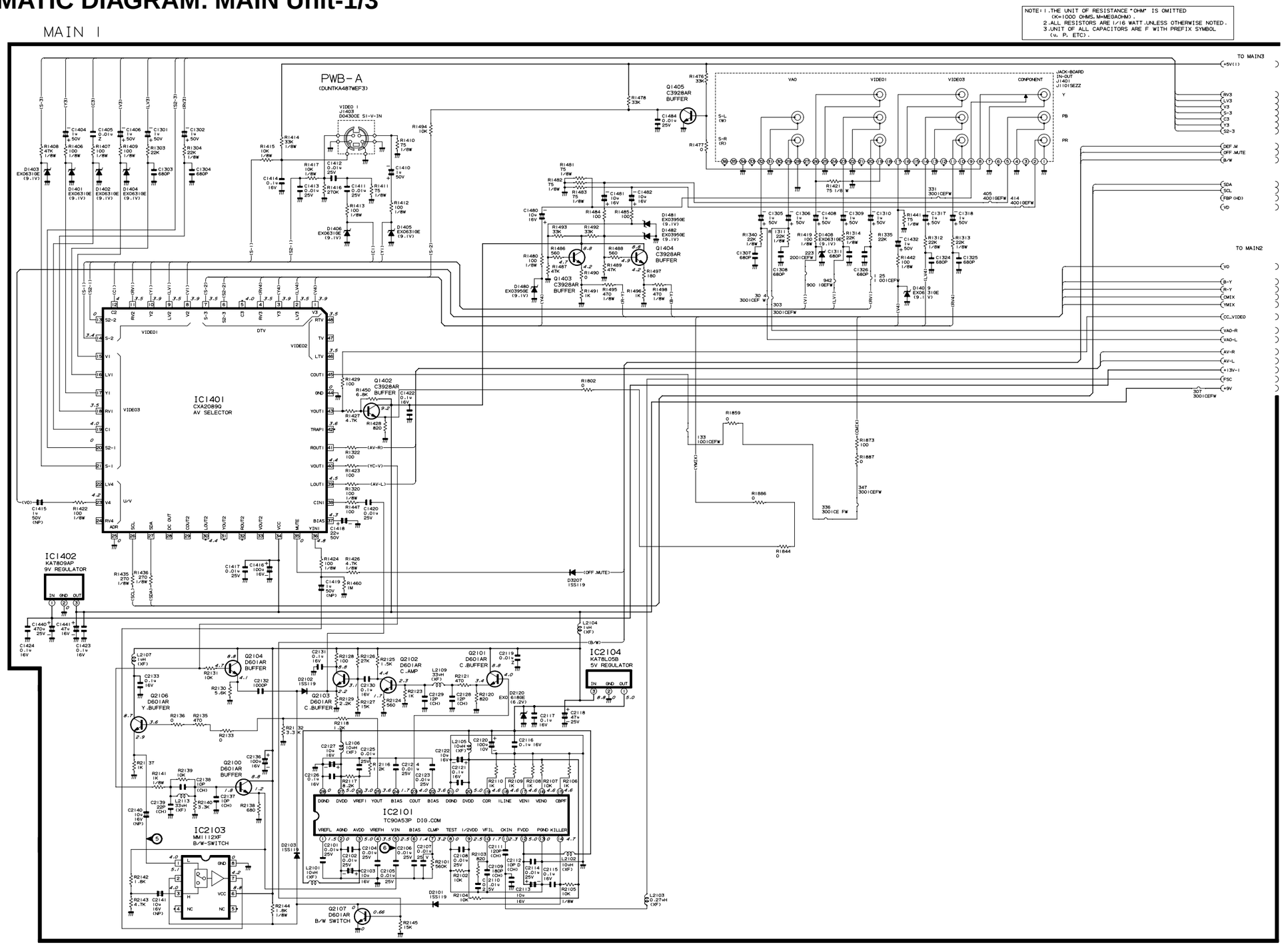


SCHEMATIC DIAGRAM: CRT Unit



SCHEMATIC DIAGRAM: MAIN Unit-1/3

MAIN I



SCHEMATIC DIAGRAM: MAIN Unit-2/3

MAIN 2

PWB-A
(DUNTKA487WEF3)

NOTE: 1. THE UNIT OF RESISTANCE "OHM" IS OMITTED (K=1000 OHMS, M=MEGAOHM).
2. ALL RESISTORS ARE 1/16 WATT UNLESS OTHERWISE NOTED.
3. UNIT OF ALL CAPACITORS ARE F WITH PREFIX SYMBOL (u, P, ETC).

TO MAIN3
SIDE_PIN
ABL
V_DRIVE
D-ABL
VM.LV2
VM.LV1
VM.CONT
+9V
OSD.B
OSD.G
OSD.R
SDA
SCL
OSD.BLK
+5V(A)
V1
HD1
FBP
HD2
C.SYNC
ABL.CONT
HV.MASK
OFF.MUTE
DEF.S
TUNE_SD
CC_VIDEO
AFT

TUNER TU201 VTBT5UF202
AGC AS SCL SDA MB BP BT VCC IFB MUTE AUDIO AFT VIDEO

5V REGULATOR IC201 KA7805AP RDA201 R0031SEFW

IC510 NJM2904M V-CENTER

9V REGULATOR IC410 PQ09RD08 RDA410 R0005SEFW

12V REGULATOR IC411 KA78S12P

IC401 IX3326CE VIDEO. CROMA. H/V

IC430 TA78L05S 5V REG.

IC3601 TA8211AH AUDIO OUTPUT

IC3602 BA15218F AUDIO AMP

IC3603 BA15218F AUDIO AMP

Q1901 C3928AR VIDEO AMP
Q1902 C3928AR BUFFER
Q1903 K2880D K30AG VM CONT
Q1904 C3928AR VM AMP
Q1905 C3928AR VM DRIVE
Q1909 C3928AR VM CONT
Q1910 C3928AR VM CONT
Q3291 C3928AR BLK CONTROL
Q3292 C3928AR BLK CONTROL
Q3601 C314TK MUTE
Q3602 C314TK MUTE
Q3603 C314TK MUTE
Q3604 C314TK MUTE
Q422 A1530AR BUFFER
Q440 A1530AR SYNC AMP
Q450 A1530AR ABL CONTROL
Q501 C3928AR V-DRIVE
Q512 C3928AR SIDEPIN
Q602 C3928AR BUFFER
Q834 C3928A R BUFFER

TO MTS | EA | SCT001 N0267FJ
+9V 1
GND 2
MTS 3
GND 4
TV_OUT-L 5 (LO)
TV_OUT-R 6 (RO)
GND 7
AUDIO-L 8
AUDIO-R 9
GND 10
LS_OUT-L 11
LS_OUT-R 12
GND 13
SCL 14 (SCL)
SDA 15 (SDA)
GND 16
VAO-L 17
VAO-R 18

P410 N0878OE
CJ | TO CRT
8 VM
7 GND
6 B
5 G
4 R
3 GND
2 +12V
1 GND

P411 Z1040CE
EH | TO POWER
1 H-DRIVE
2 GND
3 H-PULSE
4 +28V
5 +30V
6 ABL
7 GND
8 +14V
9 GND
10 GND

P413 Z1040CE
EV | TO POWER
10 GND
9 GND
8 +13V-2
7 +13V-2
6 GND
5 +13V-1
4 S-GND
3 S-GND
2 +20V
1 +20V

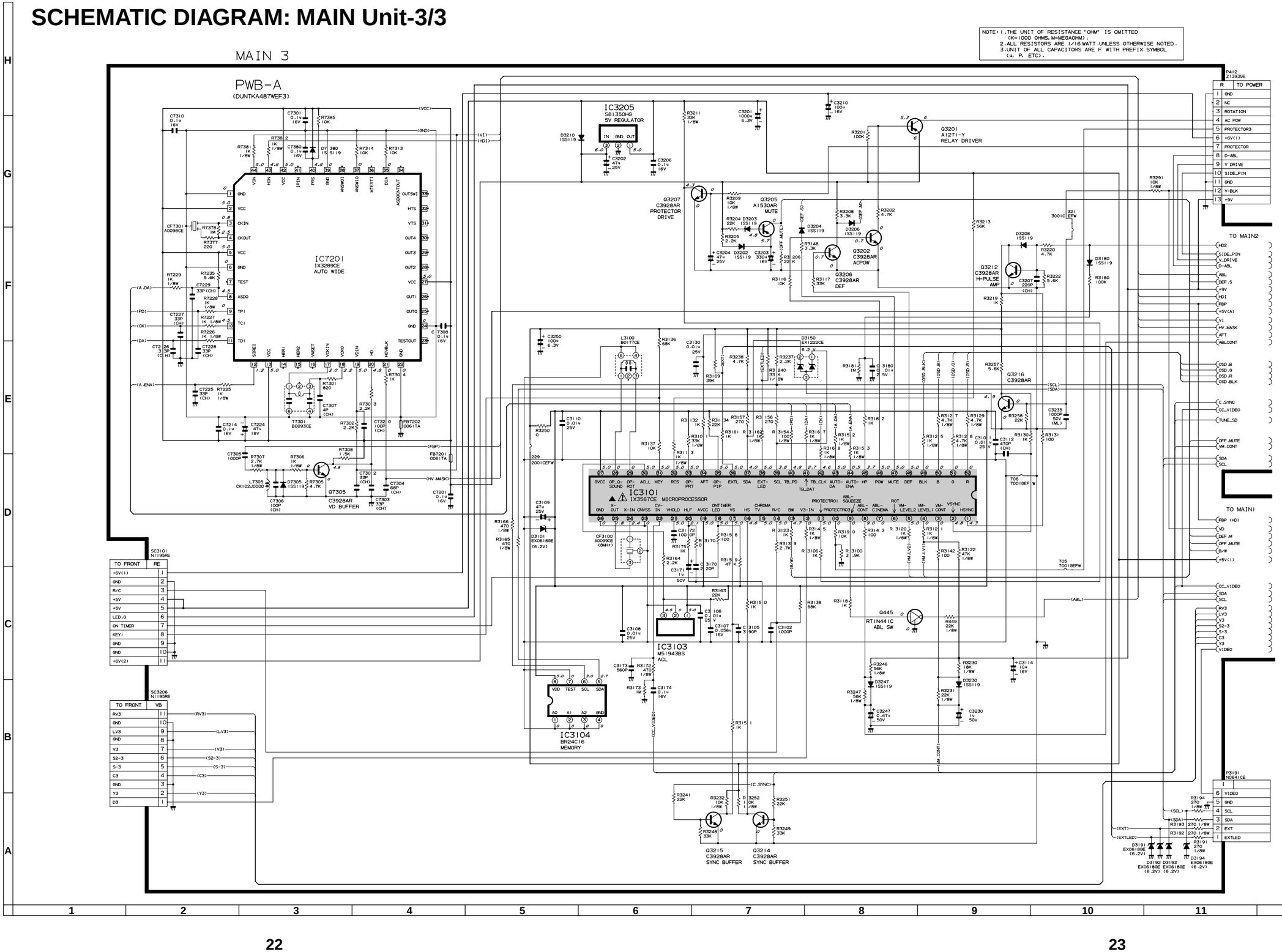
TO MAIN1
VAO-R
VAO-L
VO
+9V
+13V-1
AV-L
AV-R
LO
RO
YMIX
CMIX
B-Y
R-Y
FSC

P3601 ND441CE
TO FRONT | SH
L-OUT 1
S-GND 2
R-OUT 3
S-GND 4

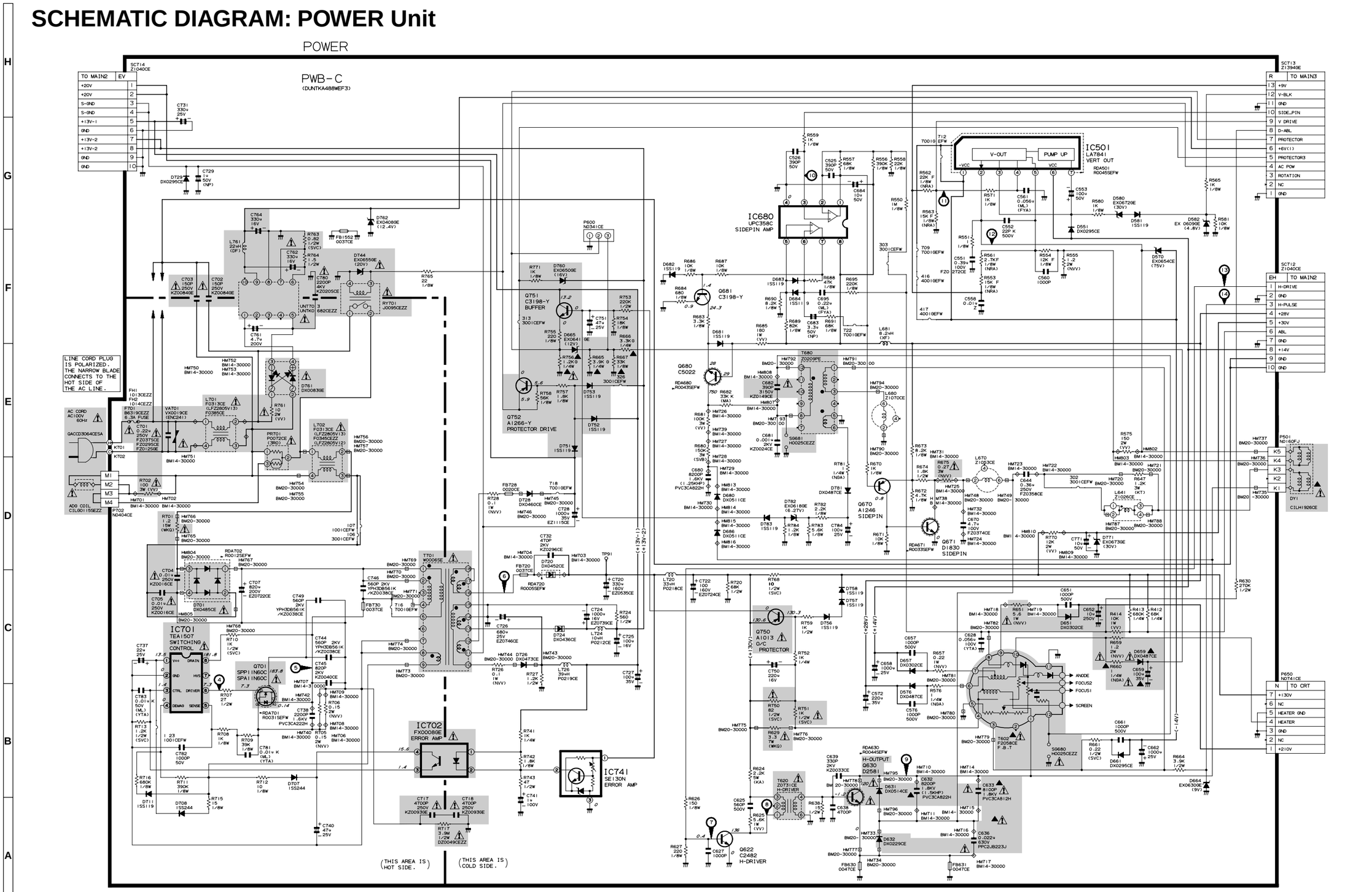
1 2 3 4 5 6 7 8 9 10 11 12

20 21

SCHEMATIC DIAGRAM: MAIN Unit-3/3



SCHEMATIC DIAGRAM: POWER Unit



TO MAIN2	EV
+20V	1
+20V	2
S-GND	3
S-GND	4
+13V-1	5
GND	6
+13V-2	7
+13V-2	8
GND	9
GND	10

R	TO MAIN3
13	+9V
12	V-BLK
11	GND
10	SIDE_PIN
9	V DRIVE
8	D-ABL
7	PROTECTOR
6	+6V(1)
5	PROTECTOR3
4	AC POW
3	ROTATION
2	NC
1	GND

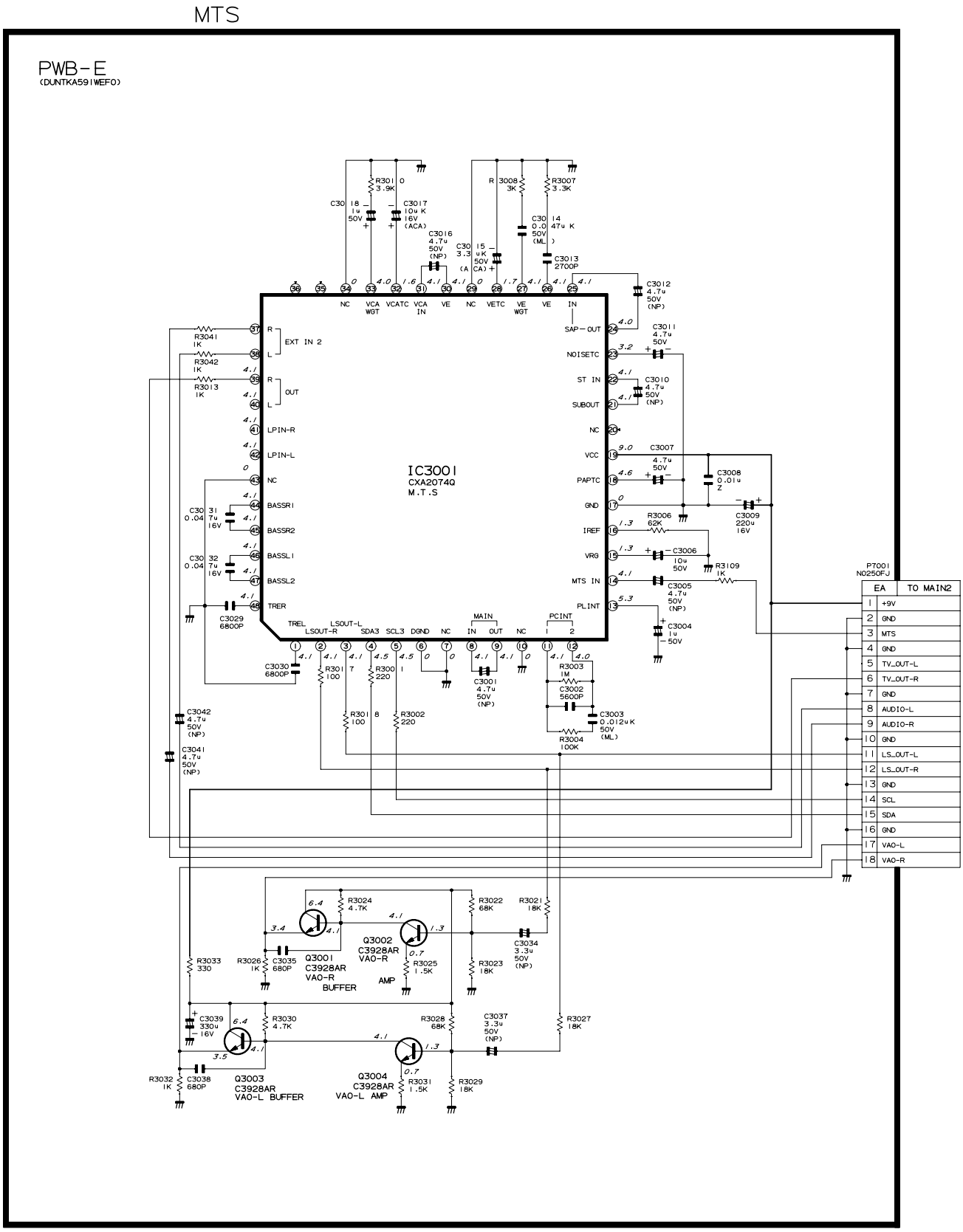
EH	TO MAIN2
1	H-DRIVE
2	GND
3	H-PULSE
4	+28V
5	+30V
6	ABL
7	GND
8	+14V
9	GND
10	GND

N	TO CRT
7	+130V
6	NC
5	HEATER GND
4	HEATER
3	GND
2	NC
1	+210V

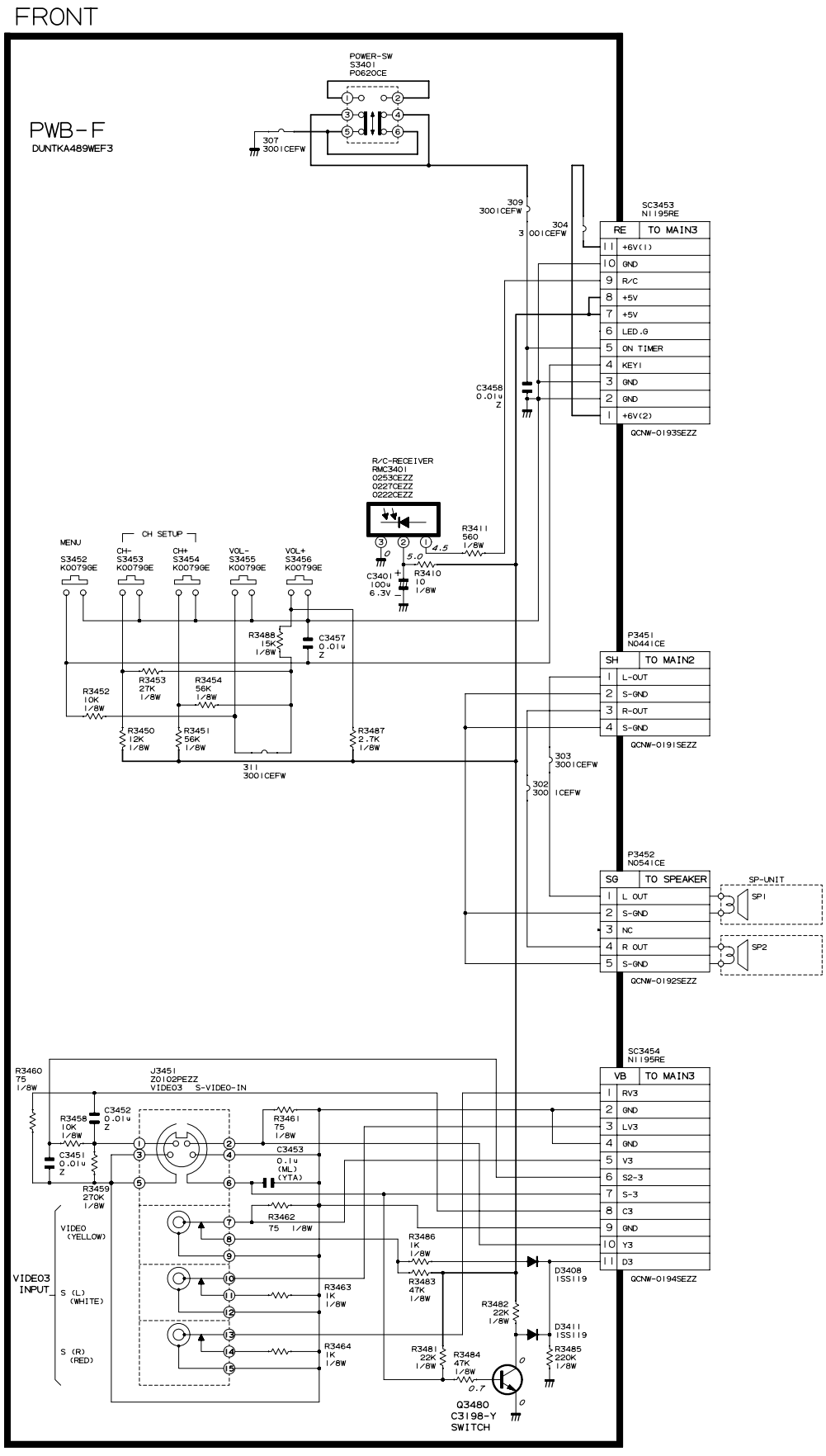
M1
M2
M3
M4

K5
K4
K3
K2
K1

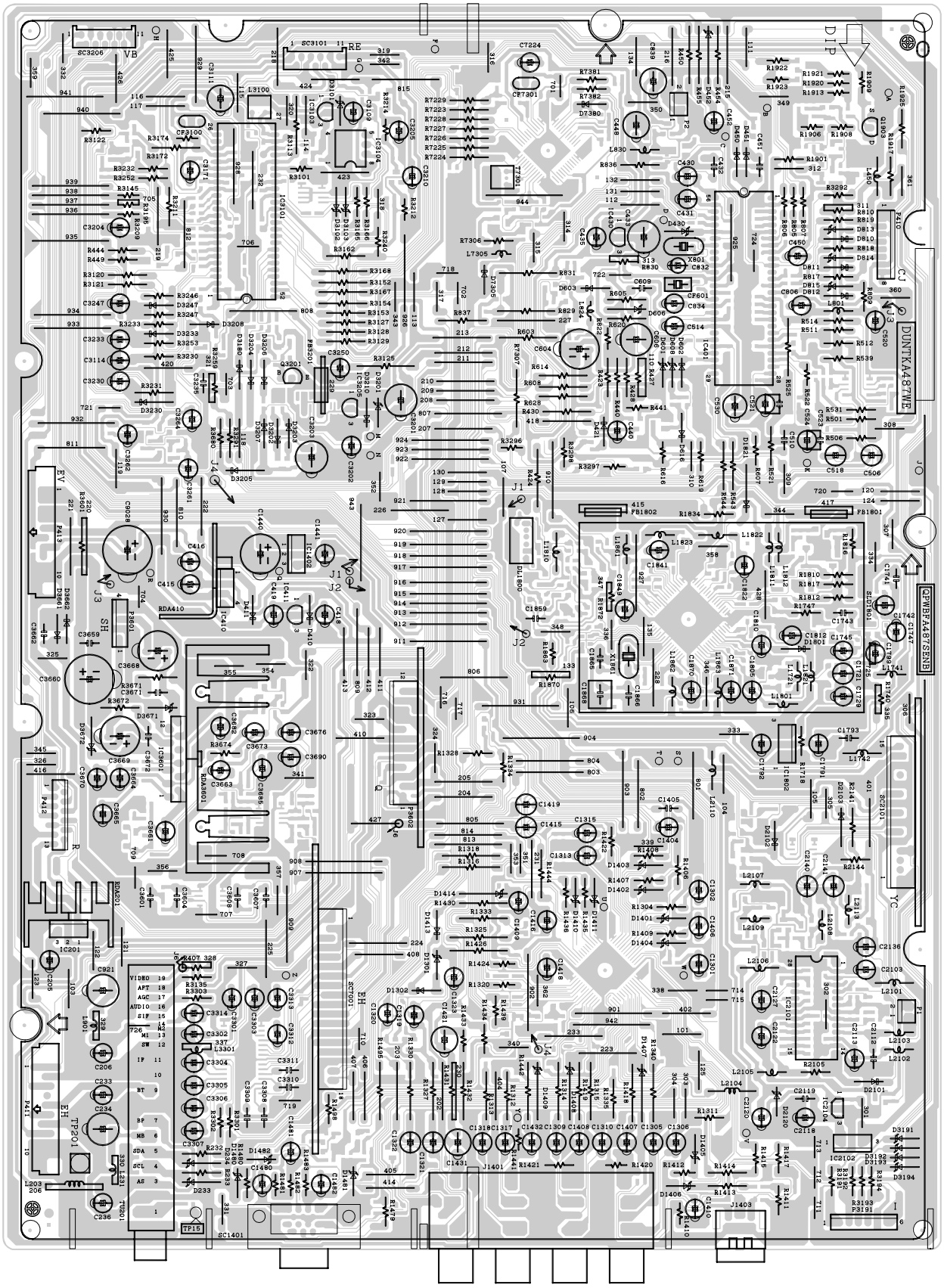
SCHEMATIC DIAGRAM: MTS MODULE Unit



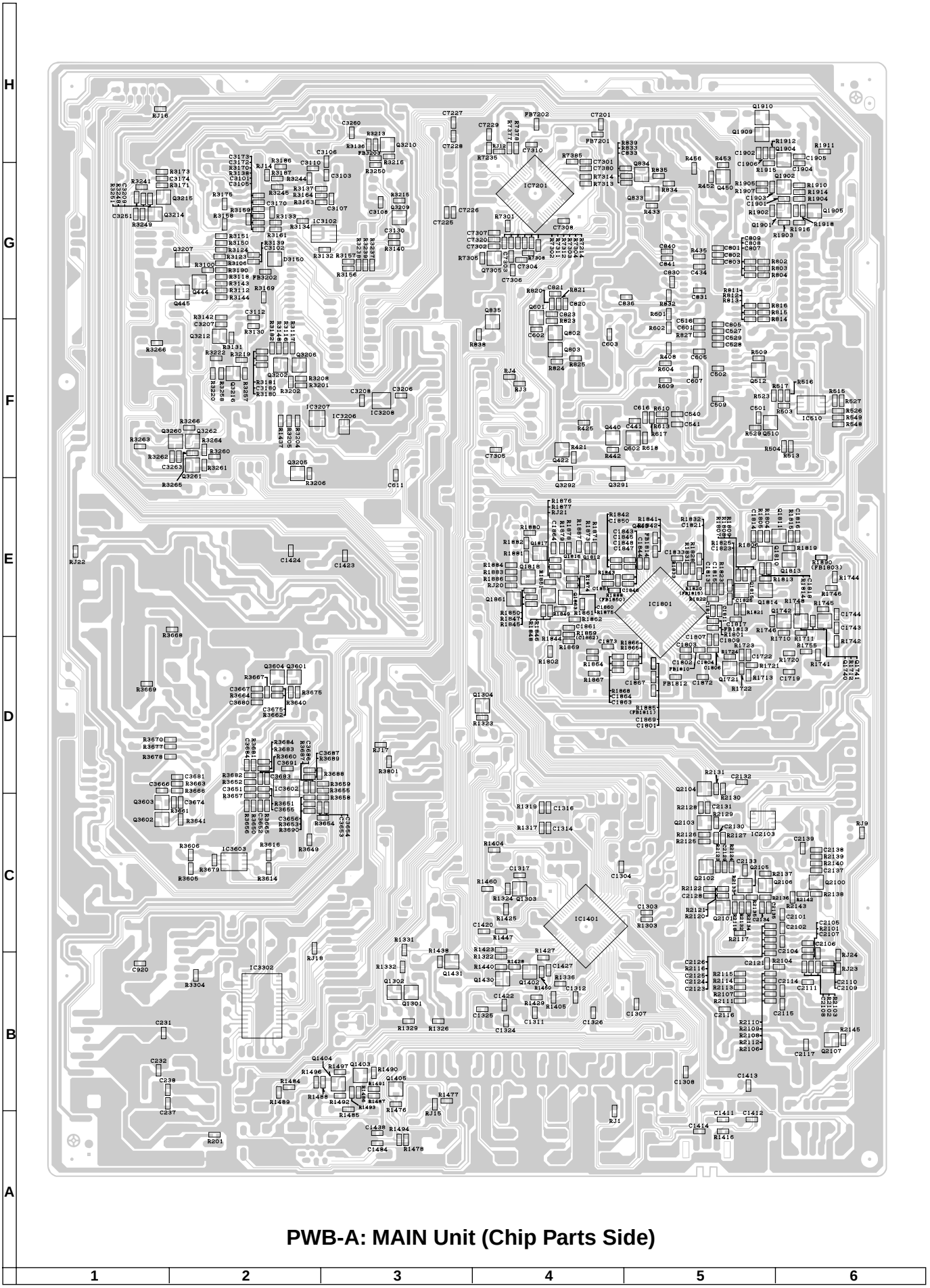
SCHEMATIC DIAGRAM: CONTROL Unit



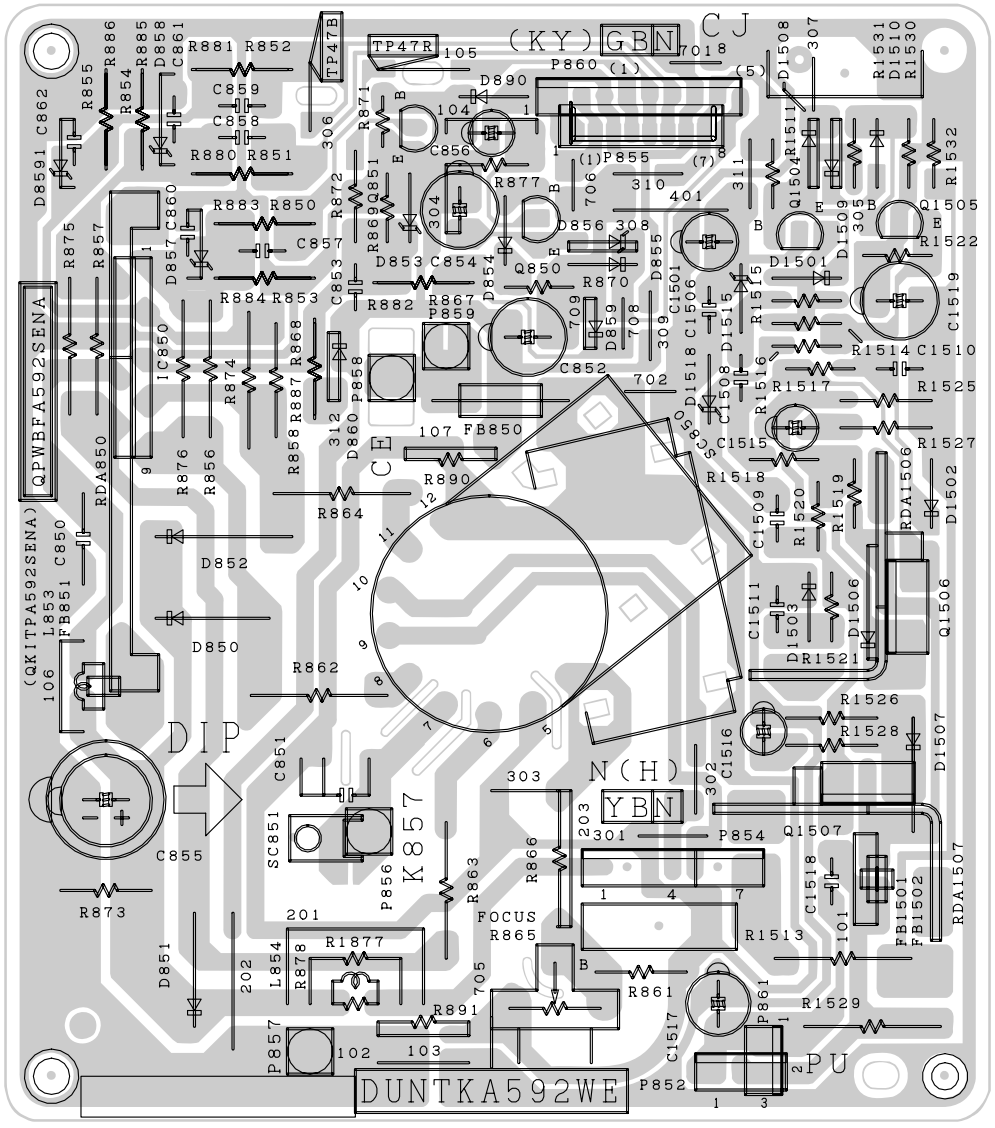
PRINTED WIRING BOARD ASSEMBLIES



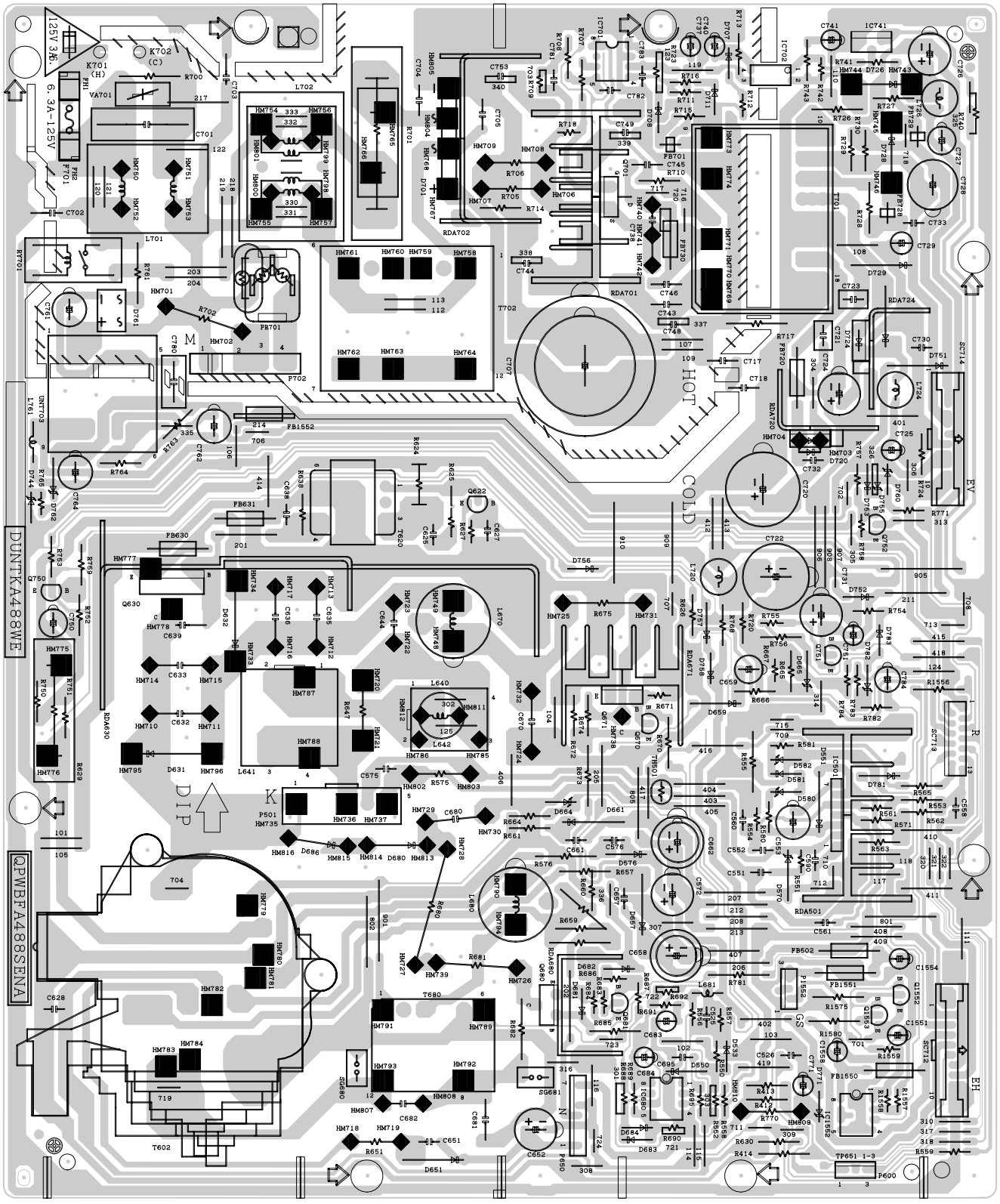
PWB-A: MAIN Unit (Wiring Side)



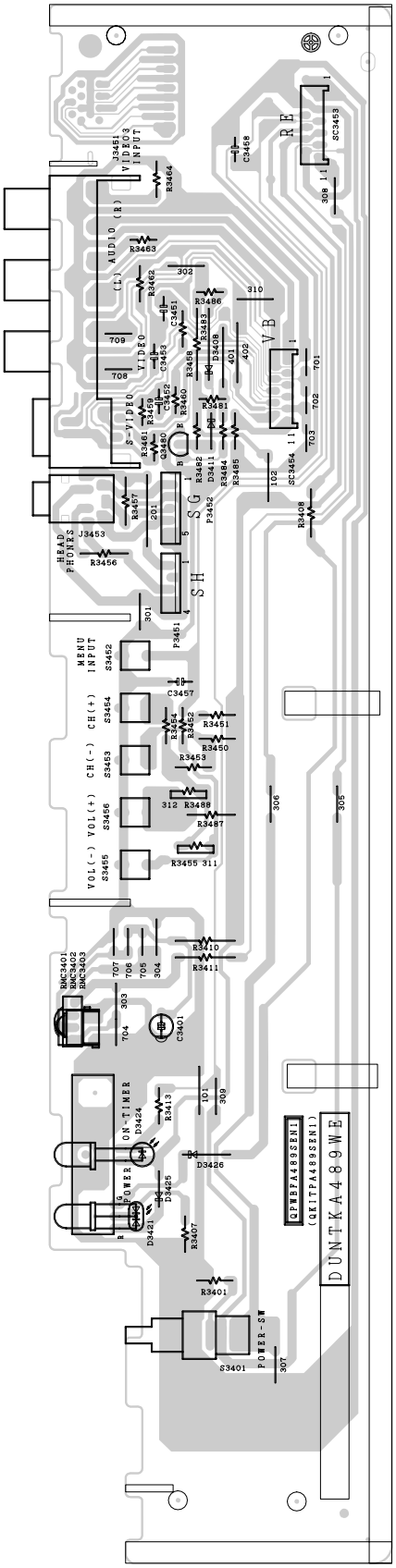
PWB-A: MAIN Unit (Chip Parts Side)



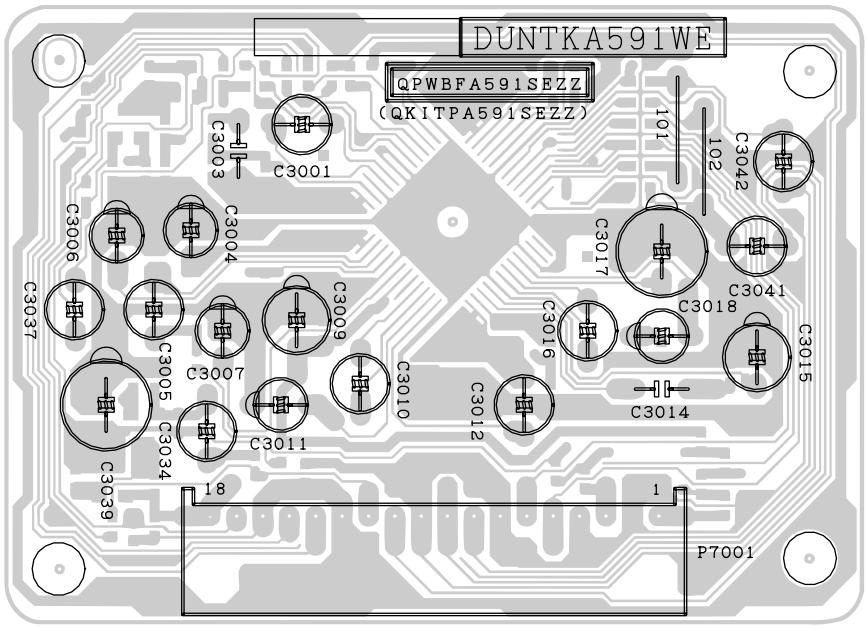
PWB-B: CRT Unit (Wiring Side)



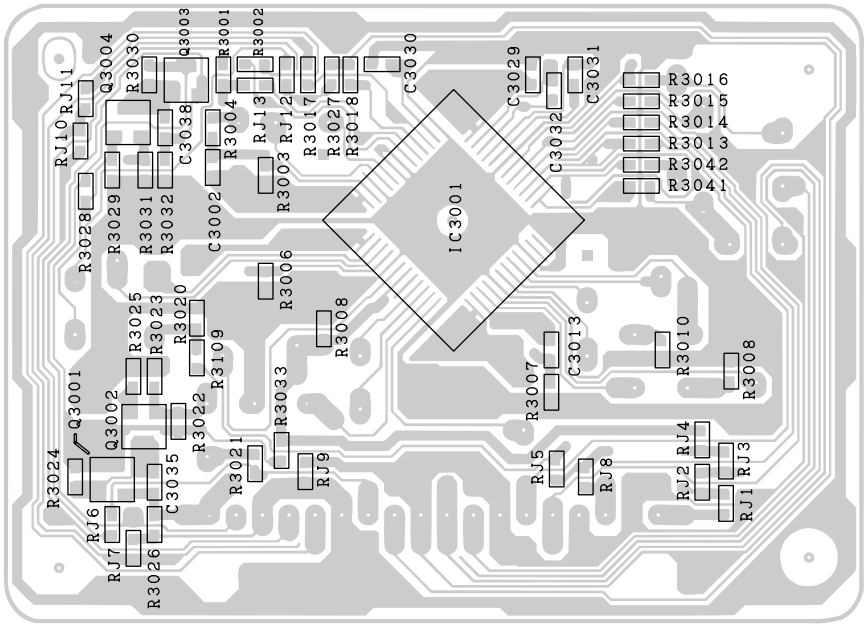
PWB-C: POWER Unit (Wiring Side)



PWB-F: CONTROL Unit (Wiring Side)



PWB-E: MTS MODULE Unit (Wiring Side)



PWB-E: MTS MODULE Unit (Chip Parts Side)

PARTS LIST

PARTS REPLACEMENT

Replacement parts which have these special safety characteristics identified in this manual; electrical components having such features are identified by ⚠ and shaded areas in the Replacement Parts Lists and Schematic Diagrams. The use of a substitute replacement part which does no have the same safety characteristic as the factory recommended replacement parts shown in this service manual may create shock, fire or other hazards.

"HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

in **USA**: Contact your nearest SHARP Parts Distributor to order. For location of SHARP Parts Distributor, Please call Toll-Free; 1-800-BE-SHARP

★ MARK: SPARE PARTS-DELIVERY SECTION

▲ MARK: X- RAY RELATED PARTS

Ref. No.	Part No.	★	Description	Code

PICTURE TUBE

▲⚠	VB68QCP892X8E	J	Picture Tube(with D.Y)	CX
⚠	RCiLG0115SEZZ	J	Degaussing Coil	AV
	PMAGF3087CEZZ	J	Purity Magnet	AL
	PMAGG3006CEZZ	J	Magnet	AC
	PSPAG0003PEZZ	R	Spacer, x3	AD
⚠	QEARC2906SEZZ	J	Grounding Strap	AK

PRINTED WIRING BOARD ASSEMBLIES
(NOT REPLACEMENT ITEM)

PWB-A	DUNTKA487WEF3	–	Main Unit	—
PWB-B	DUNTKA592WEF0	–	CRT Unit	—
PWB-C	DUNTKA488FMF3	–	Power Unit	—
PWB-E	DUNTKA591WEF0	–	MTS Module Unit	—
PWB-F	DUNTKA489FMF3	–	Control Unit	—

Ref. No.	Part No.	★	Description	Code

PWB-A: DUNTKA487WEF3
MAIN UNIT

TUNER

NOTE: THE PARTS HERES SHOWN ARE SUPPLIED AS AN ASSEMBLY BUT NOT INDEPENDENTLY.

⚠	TU201	VTUVTBT5UF202	J	Tuner	BD

INTEGRATED CIRCUITS

	IC201	VHiKA7805AP-1	J	KA7805API	AE
	IC401	RH-iX3326CEZZ	J	TA1310N	AU
	IC410	VHiPQ09RD08-1	J	PQ09RD08	AF
	IC411	VHiKA78S12P-1	J	KA78S12P	AD
	IC430	VHiTA78L05S-1	J	TA78L05S	AC
	IC510	VHiNJM2904M-1	J	NJM2904M	AE
	IC1401	VHiCXA2089Q-1	J	CXA2089Q	AN
	IC1402	VHiKA7809AP-1	J	KA7809API	AE
	IC2101	VHiTC90A53P-1	J	TC90A53N	AV
	IC2103	VHiMM1112XF1E	J	MM1112XFBE	AF
	IC2104	VHiKA78L05B-1	J	KA78L05BP	AE
▲⚠	IC3101	RH-iX3567CEZZ	J	I.C.	AZ
	IC3103	VHiM51943BS-1	J	M51943BS	AP
	IC3104	VHiBR24C16/-1	J	I.C.	AL
	IC3205	VHiS81350HG-1	J	S81350HG	AF
	IC3601	VHiTA8211AH-1	J	TA8211AH	AL
	IC3602	VHiBA15218F2E	J	BA15218F-E2	AE
	IC3603	VHiBA15218F2E	J	BA15218F-E2	AE
	IC7201	RH-iX3289CEZZ	J	IX3289CE	AQ

TRANSISTORS

	Q422	VS2SA1530AR-1	J	A1530AR	AB
	Q440	VS2SA1530AR-1	J	A1530AR	AB
	Q445	VSRT1N441C/-1	J	RT1N441C	AB
	Q450	VS2SA1530AR-1	J	A1530AR	AB
	Q510	VS2SC3928AR-1	J	C3928AR	AB
	Q512	VS2SC3928AR-1	J	C3928AR	AB
	Q602	VS2SC3928AR-1	J	C3928AR	AB
	Q834	VS2SC3928AR-1	J	C3928AR	AB
	Q1402	VS2SC3928AR-1	J	C3928AR	AB
	Q1403	VS2SC3928AR-1	J	C3928AR	AB
	Q1404	VS2SC3928AR-1	J	C3928AR	AB
	Q1405	VS2SC3928AR-1	J	C3928AR	AB
	Q1901	VS2SC3928AR-1	J	C3928AR	AB
	Q1902	VS2SC3928AR-1	J	C3928AR	AB
	Q1903	VS2SK2880D/-1	J	K2880D	AC
	Q1904	VS2SC3928AR-1	J	C3928AR	AB
	Q1905	VS2SC3928AR-1	J	C3928AR	AB
	Q1909	VS2SC3928AR-1	J	C3928AR	AB
	Q1910	VS2SC3928AR-1	J	C3928AR	AB
	Q2100	VS2SD601AR/-1	J	D601AR	AC
	Q2101	VS2SD601AR/-1	J	D601AR	AC
	Q2102	VS2SD601AR/-1	J	D601AR	AC
	Q2103	VS2SD601AR/-1	J	D601AR	AC
	Q2104	VS2SD601AR/-1	J	D601AR	AC
	Q2106	VS2SD601AR/-1	J	D601AR	AC
	Q2107	VS2SD601AR/-1	J	D601AR	AC
	Q3201	VS2SA1271-Y-1	J	A1271-Y	AB
	Q3202	VS2SC3928AR-1	J	C3928AR	AB
	Q3205	VS2SA1530AR-1	J	A1530AR	AB
	Q3206	VS2SC3928AR-1	J	C3928AR	AB
	Q3207	VS2SC3928AR-1	J	C3928AR	AB
	Q3212	VS2SC3928AR-1	J	C3928AR	AB
	Q3214	VS2SC3928AR-1	J	C3928AR	AB
	Q3215	VS2SC3928AR-1	J	C3928AR	AB
	Q3216	VS2SC3928AR-1	J	C3928AR	AB
	Q3291	VS2SC3928AR-1	J	C3928AR	AB
	Q3292	VS2SC3928AR-1	J	C3928AR	AB
	Q3601	VSDTC314TK/-1	J	C314TK	AC
	Q3602	VSDTC314TK/-1	J	C314TK	AC
	Q3603	VSDTC314TK/-1	J	C314TK	AC
	Q3604	VSDTC314TK/-1	J	C314TK	AC
	Q7305	VS2SC3928AR-1	J	C3928AR	AB

PWB-A: DUNTKA487WEF3
MAIN UNIT (Continued)

DIODES

Ref. No.	Part No.	★	Description	Code
D421	VHD1SS119//-1	J	Diode	AB
D430	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D450	VHD1SS119//-1	J	Diode	AB
D451	VHD1SS119//-1	J	Diode	AB
D452	RH-EX0628GEZZ	J	Zener Diode	AC
D601	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D602	VHD1SS119//-1	J	Diode	AB
D606	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D608	RH-EX0718GEZZ	J	Zener Diode	AB
D616	VHD1SS119//-1	J	Diode	AB
D810	VHD1SS119//-1	J	Diode	AB
D811	VHD1SS119//-1	J	Diode	AB
D812	VHD1SS119//-1	J	Diode	AB
D1401	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1402	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1403	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1404	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1405	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1406	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1408	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1409	RH-EX0631GEZZ	J	Zener Diode, 9.1V	AA
D1480	RH-EX0395GEZZ	J	Zener Diode, 9.1V	AA
D1481	RH-EX0395GEZZ	J	Zener Diode, 9.1V	AA
D1482	RH-EX0395GEZZ	J	Zener Diode, 9.1V	AA
D2101	VHD1SS119//-1	J	Diode	AB
D2102	VHD1SS119//-1	J	Diode	AB
D2103	VHD1SS119//-1	J	Diode	AB
D2120	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D3101	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D3150	RH-EX1222CEZZ	J	Zener Diode, 6.2V	AE
D3180	VHD1SS119//-1	J	Diode	AB
D3191	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D3192	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D3193	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D3194	RH-EX0618GEZZ	J	Zener Diode, 6.2V	AA
D3202	VHD1SS119//-1	J	Diode	AB
D3203	VHD1SS119//-1	J	Diode	AB
D3204	VHD1SS119//-1	J	Diode	AB
D3205	VHD1SS119//-1	J	Diode	AB
D3206	VHD1SS119//-1	J	Diode	AB
D3207	VHD1SS119//-1	J	Diode	AB
D3208	VHD1SS119//-1	J	Diode	AB
D3210	VHD1SS119//-1	J	Diode	AB
D3230	VHD1SS119//-1	J	Diode	AB
D3247	VHD1SS119//-1	J	Diode	AB
D3661	VHD1SS119//-1	J	Diode	AB
D3662	VHD1SS119//-1	J	Diode	AB
D3671	RH-EX0683GEZZ	J	Zener Diode, 36V	AB
D3672	RH-EX0683GEZZ	J	Zener Diode, 36V	AB
D7305	VHD1SS119//-1	J	Diode	AB
D7380	VHD1SS119//-1	J	Diode	AB

PACKAGED CIRCUIT

Ref. No.	Part No.	★	Description	Code
X801	RCRSB0001PEZZ	R	Crystal	AL

FILTERS

Ref. No.	Part No.	★	Description	Code
CF601	RFiLA0034CEZZ	J	Ceramic Filter	AD
CF3100	RFiLA0099CEZZ	J	Ceramic Filter	AE
CF7301	RFiLA0098CEZZ	J	Ceramic Filter	AD

COILS

Ref. No.	Part No.	★	Description	Code
L203	VP-XF100J0000	J	Peaking 10µH	AB
L450	VP-XF100J0000	J	Peaking 10µH	AB
L801	VP-XF470K0000	J	Peaking 47µH	AB
L2101	VP-XF100K0000	J	Peaking 10µH	AB
L2102	VP-XF100K0000	J	Peaking 10µH	AB
L2103	VP-XFR27K0000	J	Peaking 0.27µH	AB
L2104	VP-XF1R0K0000	J	Peaking 1µH	AB
L2105	VP-XF100K0000	J	Peaking 10µH	AB
L2106	VP-XF100K0000	J	Peaking 10µH	AB
L2107	VP-XF1R0K0000	J	Peaking 1µH	AB
L2109	VP-XF330K0000	J	Peaking 33µH	AB
L2113	VP-XF330K0000	J	Peaking 33µH	AB
L3100	RCiLB0177CEZZ	J	Oscillation Coil	AF
L7305	VPACK102J0000	J	Peaking 1mH	AB
T7301	RCiLB0093CEZZ	J	Oscillation Coil	AE

CAPACITORS

[EL.··· Electrolytic]

Ref. No.	Part No.	★				Code
C205	VCEA0A1EW476M	J	47	25V	EL.	AB
C231	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C232	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C233	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C234	VCEA0A0JW108M	J	1000	6.3V	EL.	AC
C236	VCEA0A1EW476M	J	47	25V	EL.	AB
C415	VCEA0A1CW106M	J	10	16V	EL.	AB
C416	VCEA0A1CW106M	J	10	16V	EL.	AB
C418	VCEA0A1EW476M	J	47	25V	EL.	AB
C419	VCEA0A1CW106M	J	10	16V	EL.	AB
C430	VCEA0A1CW106M	J	10	16V	EL.	AB
C431	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C432	VCQYTA1HM104J	J	0.1	50V	Mylar	AA
C433	VCEA0A1CW477M	J	470	16V	EL.	AC
C434	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C435	VCEA0A1CW106M	J	10	16V	EL.	AB
C440	VCEA0A1HW225M	J	2.2	50V	EL.	AB
C441	VCKYCY1HB561K	J	560p	50V	Ceramic	AA
C448	VCEA0A1CW227M	J	220	16V	EL.	AC
C450	VCEA0A1HW474M	J	0.47	50V	EL.	AB
C451	VCFYFA1HA334J	J	0.33	50V	Mylar	AB
C452	VCEA0A1HW226M	J	22	50V	EL.	AB
C501	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C502	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C506	VCE9GA1CW106M	J	10	16V	EL. (N.P)	AB
C509	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C510	VCQYTA1HM683J	J	0.068	50V	Mylar	AB
C514	VCEA0A1HW225M	J	2.2	50V	EL.	AB
C516	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C520	VCEA0A1HW226M	J	22	50V	EL.	AB
C521	VCEACA1HC105M	J	1.0	50V	EL.	AC
C523	VCFYFA1HA474J	J	0.47	50V	Mylar	AC
C527	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C528	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C529	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C530	VCEACA1HC105M	J	1.0	50V	EL.	AC
C601	VCKYCY1EB223K	J	0.022	25V	Ceramic	AA
C603	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C604	VCEA0A1CW108M	J	1000	16V	EL.	AD
C605	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C606	VCEA0A1CW477M	J	470	16V	EL.	AC
C611	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C616	VCCCCY1HH560J	J	56p	50V	Ceramic	AA
C801	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C802	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C803	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C805	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C806	VCEA0A1CW107M	J	100	16V	EL.	AC
C807	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C808	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C809	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C820	VCCCCY1HH820J	J	82p	50V	Ceramic	AA
C821	VCCCCY1HH820J	J	82p	50V	Ceramic	AA
C830	VCCCCY1HH120J	J	12p	50V	Ceramic	AA
C831	VCKYCY1HB222K	J	2200p	50V	Ceramic	AA
C832	VCEA0A1HW224M	J	0.22	50V	EL.	AB
C834	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C836	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C840	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C841	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C920	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C921	VCEA0A1CW337M	J	330	16V	EL.	AC
C1301	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1302	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1303	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1304	VCKYCY1HB681K	J	680p	50V	Ceramic	AA

PWB-A: DUNTKA487WEF3
MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C1305	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1306	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1307	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1308	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1309	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1310	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1311	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1317	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1318	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1324	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1325	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1326	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C1404	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1405	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C1406	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1408	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1410	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1411	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1412	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1413	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1414	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C1415	VCE9GA1HW105M	J	1.0	50V	EL. (N.P)	AB
C1416	VCEA0A1CW107M	J	100	16V	EL.	AC
C1417	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1418	VCEA0A1HW226M	J	22	50V	EL.	AB
C1419	VCE9GA1HW105M	J	1.0	50V	EL. (N.P)	AB
C1420	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1422	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C1423	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C1424	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C1432	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C1440	VCEA0A1EW477M	J	470	25V	EL.	AD
C1441	VCEA0A1CW476M	J	47	16V	EL.	AB
C1480	VCEA0A1CW106M	J	10	16V	EL.	AB
C1481	VCEA0A1CW106M	J	10	16V	EL.	AB
C1482	VCEA0A1CW106M	J	10	16V	EL.	AB
C1484	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1902	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1903	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C1904	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C1905	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C1906	VCKYCY1HB331K	J	330p	50V	Ceramic	AA
C1907	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2101	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2102	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2103	VCEA0A1CW106M	J	10	16V	EL.	AB
C2104	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2105	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2106	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2107	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2108	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2109	VCCCCY1HH181J	J	180p	50V	Ceramic	AA
C2110	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2111	VCCCCY1HH121J	J	120p	50V	Ceramic	AA
C2112	VCCCPA1HH100D	J	10p	50V	Ceramic	AA
C2113	VCEA0A1CW106M	J	10	16V	EL.	AB
C2114	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2115	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2116	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2117	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2118	VCEA0A1EW476M	J	47	25V	EL.	AB
C2119	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C2120	VCEA0A1AW107M	J	100	10V	EL.	AB
C2121	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2122	VCEA0A1CW106M	J	10	16V	EL.	AB
C2123	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2124	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2125	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C2126	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2127	VCEA0A1CW106M	J	10	16V	EL.	AB
C2128	VCCCCY1HH120J	J	12p	50V	Ceramic	AA
C2129	VCCCCY1HH120J	J	12p	50V	Ceramic	AA
C2130	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2131	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2132	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C2133	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C2136	VCEA0A1CW107M	J	100	16V	EL.	AC
C2137	VCCCCY1HH100D	J	10p	50V	Ceramic	AA
C2138	VCCCCY1HH100D	J	10p	50V	Ceramic	AA
C2139	VCCCCY1HH220J	J	22p	50V	Ceramic	AA
C2140	VCE9GA1CW106M	J	10	16V	EL. (N.P)	AB
C2141	VCE9GA1CW106M	J	10	16V	EL. (N.P)	AB
C3101	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C3102	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C3105	VCKYCY1HB391K	J	390p	50V	Ceramic	AA
C3106	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C3107	VCKYCY1CB563K	J	0.056	16V	Ceramic	AB
C3108	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C3109	VCEA0A1EW476M	J	47	25V	EL.	AB
C3110	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C3112	VCCCCY1HH471J	J	470p	50V	Ceramic	AA
C3114	VCEA0A1CW106M	J	10	16V	EL.	AB
C3130	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C3170	VCKYCY1HB221K	J	220p	50V	Ceramic	AA
C3171	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3172	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C3173	VCKYCY1HB561K	J	560p	50V	Ceramic	AA
C3174	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C3180	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C3201	VCEA0A0JW108M	J	1000	6.3V	EL.	AC
C3202	VCEA0A1EW476M	J	47	25V	EL.	AB
C3203	VCEA0A1CW337M	J	330	16V	EL.	AC
C3204	VCEA0A1EW476M	J	47	25V	EL.	AB
C3206	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C3207	VCCCCY1HH221J	J	220p	50V	Ceramic	AA
C3210	VCEA0A1CW107M	J	100	16V	EL.	AC
C3230	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3235	VCQYTA1HM102J	J	1000p	50V	Mylar	AA
C3247	VCEA0A1HW474M	J	0.47	50V	EL.	AB
C3250	VCEA0A0JW107M	J	100	6.3V	EL.	AB
C3314	VCEA0A1CW106M	J	10	16V	EL.	AB
C3601	VCFYFA1HA334J	J	0.33	50V	Mylar	AB
C3604	VCFYFA1HA154J	J	0.15	50V	Mylar	AC
C3607	VCFYFA1HA334J	J	0.33	50V	Mylar	AB
C3608	VCFYFA1HA154J	J	0.15	50V	Mylar	AC
C3659	VCQYTA1HM104J	J	0.1	50V	Mylar	AA
C3660	VCEA0V1VW108M	J	1000	35V	EL.	AD
C3661	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3662	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C3663	VCEA0A1HW335M	J	3.3	50V	EL.	AB
C3664	VCEA0A1EW476M	J	47	25V	EL.	AB
C3665	VCEA0A1EW476M	J	47	25V	EL.	AB
C3666	VCKYCY1CB333K	J	0.033	16V	Ceramic	AA
C3667	VCKYCY1CB333K	J	0.033	16V	Ceramic	AA
C3668	VCEA0A1EW477M	J	470	25V	EL.	AD
C3669	VCEA0A1EW477M	J	470	25V	EL.	AD
C3670	VCEA0A1CW107M	J	100	16V	EL.	AC
C3671	VCQYTA1HM104J	J	0.1	50V	Mylar	AA
C3672	VCQYTA1HM104J	J	0.1	50V	Mylar	AA
C3673	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3674	VCKYCY1CB333K	J	0.033	16V	Ceramic	AA
C3675	VCKYCY1CB333K	J	0.033	16V	Ceramic	AA
C3676	VCEA0A1HW335M	J	3.3	50V	EL.	AB
C3680	VCKYCY1HB821K	J	820p	50V	Ceramic	AA
C3681	VCKYCY1HB821K	J	820p	50V	Ceramic	AA
C3682	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3683	VCCCCY1HH331J	J	330p	50V	Ceramic	AA
C3685	VCEA0A1CW106M	J	10	16V	EL.	AB
C3686	VCCCCY1HH331J	J	330p	50V	Ceramic	AA
C3690	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3691	VCKYCY1EB103K	J	0.01	25V	Ceramic	AA
C7201	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C7214	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C7224	VCEA0A1CW476M	J	47	16V	EL.	AB
C7225	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C7226	VCCCCY1HH330J	J	33p	50V	Ceramic	AA

PWB-A: DUNTKA487WEF3
MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C7227	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C7228	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C7229	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C7301	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C7302	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C7303	VCCCCY1HH330J	J	33p	50V	Ceramic	AA
C7304	VCCCCY1HH680J	J	68p	50V	Ceramic	AA
C7305	VCKYCY1HB102K	J	1000p	50V	Ceramic	AA
C7306	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C7307	VCCCCY1HH4R0C	J	4.0p	50V	Ceramic	AA
C7308	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C7310	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB
C7320	VCCCCY1HH101J	J	100p	50V	Ceramic	AA
C7380	VCKYCY1CB104K	J	0.1	16V	Ceramic	AB

RESISTORS

[M-Ox.··· Metal Oxide]

RJ1	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ3	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ4	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ9	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ12	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ14	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ15	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ16	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ17	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ18	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ20	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ25	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ27	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R201	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R232	VRD-RA2BE181J	J	180	1/8W	Carbon	AA
R233	VRD-RA2BE181J	J	180	1/8W	Carbon	AA
R421	VRS-CY1JF181J	J	180	1/16W	M-Ox.	AA
R423	VRD-RA2BE222J	J	2.2k	1/8W	Carbon	AA
R424	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R425	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R428	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R433	VRS-CY1JF562J	J	5.6k	1/16W	M-Ox.	AA
R435	VRS-CY1JF394J	J	390k	1/16W	M-Ox.	AA
R440	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R441	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R442	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R449	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R450	VRD-RA2BE154J	J	150k	1/8W	Carbon	AA
R452	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R453	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R454	VRD-RA2BE562J	J	5.6k	1/8W	Carbon	AA
R455	VRD-RA2BE680J	J	68	1/8W	Carbon	AA
R456	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R501	VRD-RA2BE332J	J	3.3k	1/8W	Carbon	AA
R509	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R511	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R512	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R514	VRN-RA2BK104F	J	100k	1/8W	M-Film	AA
R515	VRS-CY1JF683F	J	68k	1/16W	M-Ox.	AA
R516	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R521	VRD-RA2BE155J	J	1.5M	1/8W	Carbon	AA
R522	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R523	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R525	VRD-RA2BE154J	J	150k	1/8W	Carbon	AA
R526	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R527	VRS-CY1JF563J	J	56k	1/16W	M-Ox.	AA
R529	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R543	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R544	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R548	VRS-CY1JF224F	J	220k	1/16W	M-Ox.	AA
R549	VRS-CY1JF104F	J	100k	1/16W	M-Ox.	AA
R601	VRS-CY1JF331J	J	330	1/16W	M-Ox.	AA
R602	VRS-CY1JF392J	J	3.9k	1/16W	M-Ox.	AA
R604	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R607	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R608	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R609	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R610	VRS-CY1JF272J	J	2.7k	1/16W	M-Ox.	AA
R613	VRS-CY1JF272J	J	2.7k	1/16W	M-Ox.	AA
R614	VRD-RA2HD121J	J	120	1/2W	Carbon	AA
R616	VRD-RA2BE152J	J	1.5k	1/8W	Carbon	AA
R617	VRS-CY1JF272J	J	2.7k	1/16W	M-Ox.	AA
R618	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R619	VRD-RA2BE222J	J	2.2k	1/8W	Carbon	AA
R628	VRD-RA2BE561J	J	560	1/8W	Carbon	AA
R802	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R803	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R804	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R805	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R806	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R807	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R809	VRD-RA2BE561J	J	560	1/8W	Carbon	AA
R810	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R811	VRS-CY1JF181J	J	180	1/16W	M-Ox.	AA
R812	VRS-CY1JF181J	J	180	1/16W	M-Ox.	AA
R813	VRS-CY1JF181J	J	180	1/16W	M-Ox.	AA
R814	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R815	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R816	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R817	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R818	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R819	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R820	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R821	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R827	VRS-CY1JF106J	J	10M	1/16W	M-Ox.	AA
R832	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R835	VRS-CY1JF272J	J	2.7k	1/16W	M-Ox.	AA
R839	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1303	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R1304	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R1311	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R1312	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R1313	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R1314	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R1320	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1322	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1335	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R1340	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R1406	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1407	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1408	VRD-RA2BE473J	J	47k	1/8W	Carbon	AA
R1409	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1410	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1411	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1412	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1413	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1414	VRD-RA2BE333J	J	33k	1/8W	Carbon	AA
R1415	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R1416	VRS-CY1JF274J	J	270k	1/16W	M-Ox.	AA
R1417	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R1419	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1421	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1422	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1423	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1424	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1426	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R1427	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R1428	VRS-CY1JF821J	J	820	1/16W	M-Ox.	AA
R1429	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1435	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R1436	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R1441	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1442	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1447	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1450	VRS-CY1JF682J	J	6.8k	1/16W	M-Ox.	AA
R1460	VRS-CY1JF105J	J	1.0M	1/16W	M-Ox.	AA
R1476	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R1477	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1478	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA

PWB-A: DUNTKA487WEF3
MAIN UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
R1480	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1481	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1482	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1483	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R1484	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1485	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1486	VRS-CY1JF561J	J	560	1/16W	M-Ox.	AA
R1487	VRS-CY1JF473J	J	47k	1/16W	M-Ox.	AA
R1488	VRS-CY1JF561J	J	560	1/16W	M-Ox.	AA
R1489	VRS-CY1JF473J	J	47k	1/16W	M-Ox.	AA
R1490	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1491	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R1492	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R1493	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R1494	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R1495	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R1496	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R1497	VRS-CY1JF181J	J	180	1/16W	M-Ox.	AA
R1498	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R1802	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1844	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1859	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1873	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R1886	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1887	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R1901	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R1902	VRS-CY1JF681J	J	680	1/16W	M-Ox.	AA
R1903	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R1904	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R1905	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R1906	VRD-RA2BE273J	J	27k	1/8W	Carbon	AA
R1907	VRS-CY1JF471J	J	470	1/16W	M-Ox.	AA
R1908	VRD-RA2BE681J	J	680	1/8W	Carbon	AA
R1909	VRD-RA2BE823J	J	82k	1/8W	Carbon	AA
R1910	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R1911	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R1912	VRS-CY1JF151J	J	150	1/16W	M-Ox.	AA
R1913	VRD-RA2BE332J	J	3.3k	1/8W	Carbon	AA
R1914	VRS-CY1JF182J	J	1.8k	1/16W	M-Ox.	AA
R1915	VRS-CY1JF393J	J	39k	1/16W	M-Ox.	AA
R1916	VRS-CY1JF563J	J	56k	1/16W	M-Ox.	AA
R1917	VRD-RA2EE222J	J	2.2k	1/4W	Carbon	AA
R1918	VRS-CY1JF273J	J	27k	1/16W	M-Ox.	AA
R1920	VRD-RA2BE221J	J	220	1/8W	Carbon	AA
R1921	VRD-RA2BE561J	J	560	1/8W	Carbon	AA
R1922	VRD-RA2BE392J	J	3.9k	1/8W	Carbon	AA
R1923	VRD-RA2BE392J	J	3.9k	1/8W	Carbon	AA
R1925	VRD-RA2BE560J	J	56	1/8W	Carbon	AA
R2101	VRS-CY1JF564J	J	560k	1/16W	M-Ox.	AA
R2102	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R2103	VRS-CY1JF821J	J	820	1/16W	M-Ox.	AA
R2104	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R2105	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R2106	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R2107	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R2108	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R2109	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R2110	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R2116	VRS-CY1JF123J	J	12k	1/16W	M-Ox.	AA
R2117	VRS-CY1JF822J	J	8.2k	1/16W	M-Ox.	AA
R2118	VRS-CY1JF122J	J	1.2k	1/16W	M-Ox.	AA
R2120	VRS-CY1JF821J	J	820	1/16W	M-Ox.	AA
R2121	VRS-CY1JF471J	J	470	1/16W	M-Ox.	AA
R2123	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R2124	VRS-CY1JF561J	J	560	1/16W	M-Ox.	AA
R2125	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R2126	VRS-CY1JF273J	J	27k	1/16W	M-Ox.	AA
R2127	VRS-CY1JF153J	J	15k	1/16W	M-Ox.	AA
R2128	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R2129	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R2130	VRS-CY1JF562J	J	5.6k	1/16W	M-Ox.	AA
R2131	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R2132	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R2133	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R2135	VRS-CY1JF471J	J	470	1/16W	M-Ox.	AA
R2136	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R2137	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R2138	VRS-CY1JF681J	J	680	1/16W	M-Ox.	AA
R2139	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R2140	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R2141	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R2142	VRS-CY1JF182J	J	1.8k	1/16W	M-Ox.	AA
R2143	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R2144	VRD-RA2BE182J	J	1.8k	1/8W	Carbon	AA
R2145	VRS-CY1JF153J	J	15k	1/16W	M-Ox.	AA
R3100	VRS-CY1JF392J	J	3.9k	1/16W	M-Ox.	AA
R3101	VRD-RA2BE333J	J	33k	1/8W	Carbon	AA
R3106	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3113	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3116	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R3117	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R3118	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3120	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3121	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3122	VRD-RA2BE473J	J	47k	1/8W	Carbon	AA
R3123	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3125	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3127	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R3128	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R3129	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R3130	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3131	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3132	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3134	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3135	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R3136	VRS-CY1JF683J	J	68k	1/16W	M-Ox.	AA
R3137	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R3138	VRS-CY1JF683J	J	68k	1/16W	M-Ox.	AA
R3139	VRS-CY1JF272J	J	2.7k	1/16W	M-Ox.	AA
R3142	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3143	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3145	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3148	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R3150	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3151	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3152	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3153	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3154	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R3156	VRS-CY1JF271J	J	270	1/16W	M-Ox.	AA
R3157	VRS-CY1JF271J	J	270	1/16W	M-Ox.	AA
R3158	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3159	VRS-CY1JF473J	J	47k	1/16W	M-Ox.	AA
R3161	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3162	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3163	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3164	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R3165	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R3166	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R3167	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3168	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3169	VRS-CY1JF393J	J	39k	1/16W	M-Ox.	AA
R3170	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R3172	VRD-RA2BE471J	J	470	1/8W	Carbon	AA
R3173	VRS-CY1JF105J	J	1.0M	1/16W	M-Ox.	AA
R3175	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3180	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R3181	VRS-CY1JF105J	J	1.0M	1/16W	M-Ox.	AA
R3182	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3190	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R3191	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R3192	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R3193	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R3194	VRD-RA2BE271J	J	270	1/8W	Carbon	AA
R3201	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R3202	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R3204	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA

PWB-A: DUNTKA487WEF3
MAIN UNIT (Continued)

Ref. No.	Part No.	★	Description			Code
R3205	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R3206	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3208	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R3209	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R3211	VRD-RA2BE333J	J	33k	1/8W	Carbon	AA
R3213	VRS-CY1JF563J	J	56k	1/16W	M-Ox.	AA
R3219	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3220	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R3222	VRS-CY1JF562J	J	5.6k	1/16W	M-Ox.	AA
R3230	VRD-RA2BE183J	J	18k	1/8W	Carbon	AA
R3231	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R3232	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R3237	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R3238	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R3240	VRD-RA2BE333J	J	33k	1/8W	Carbon	AA
R3241	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3246	VRD-RA2BE563J	J	56k	1/8W	Carbon	AA
R3247	VRD-RA2BE563J	J	56k	1/8W	Carbon	AA
R3248	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R3249	VRS-CY1JF333J	J	33k	1/16W	M-Ox.	AA
R3250	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R3251	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3252	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R3257	VRS-CY1JF562J	J	5.6k	1/16W	M-Ox.	AA
R3258	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3291	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R3292	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3296	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3297	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3298	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3303	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R3605	VRS-CY1JF123J	J	12k	1/16W	M-Ox.	AA
R3606	VRS-CY1JF123J	J	12k	1/16W	M-Ox.	AA
R3614	VRS-CY1JF123J	J	12k	1/16W	M-Ox.	AA
R3616	VRS-CY1JF123J	J	12k	1/16W	M-Ox.	AA
R3640	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R3641	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R3660	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3661	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R3662	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R3663	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R3664	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R3665	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R3666	VRS-CY1JF182J	J	1.8k	1/16W	M-Ox.	AA
R3667	VRS-CY1JF182J	J	1.8k	1/16W	M-Ox.	AA
R3668	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R3669	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R3670	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3671	VRD-RA2EE2R2J	J	2.2	1/4W	Carbon	AA
R3672	VRD-RA2EE2R2J	J	2.2	1/4W	Carbon	AA
R3674	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3675	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3677	VRS-CY1JF221J	J	220	1/16W	M-Ox.	AA
R3678	VRS-CY1JF221J	J	220	1/16W	M-Ox.	AA
R3680	VRD-RA2BE101J	J	100	1/8W	Carbon	AB
R3681	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3683	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R3684	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R3687	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3689	VRS-CY1JF223J	J	22k	1/16W	M-Ox.	AA
R3690	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R3801	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R7225	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7226	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7227	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7228	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7229	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7235	VRS-CY1JF562J	J	5.6k	1/16W	M-Ox.	AA
R7301	VRS-CY1JF821J	J	820	1/16W	M-Ox.	AA
R7302	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R7303	VRS-CY1JF222J	J	2.2k	1/16W	M-Ox.	AA
R7304	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R7305	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R7306	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7307	VRD-RA2BE272J	J	2.7k	1/8W	Carbon	AA
R7308	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R7313	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R7314	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA
R7377	VRS-CY1JF221J	J	220	1/16W	M-Ox.	AA
R7378	VRS-CY1JF105J	J	1.0M	1/16W	M-Ox.	AA
R7381	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7382	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R7385	VRS-CY1JF103J	J	10k	1/16W	M-Ox.	AA

MISCELLANEOUS PARTS

FB7201	RBLN-0061TAZZ	J	Ferrite Bead	AD
FB7202	RBLN-0061TAZZ	J	Ferrite Bead	AD
J1401	QTANJ1101SEZZ	J	Rear AV Terminal	AL
J1403	QSOCD0430CEZZ	J	Socket, S-Video IN	AE
P410	QPLGN0878GEZZ	J	Plug, 8-pin(CJ)	AC
P411	QPLGZ1040CEZZ	J	Plug, 10-pin(EH)	AE
P412	QPLGZ1393GEZZ	J	Plug, 13-pin(R)	AE
P413	QPLGZ1040CEZZ	J	Plug, 10-pin(EV)	AE
P3191	QPLGN0641CEZZ	J	Plug, 6-pin(I)	AB
P3601	QPLGN0441CEZZ	J	Plug, 4-pin(SH)	AB
SC3101	QSOCN1195REZZ	J	Socket, 11-pin(RE)	AC
SC3206	QSOCN1195REZZ	J	Socket, 11-pin(VB)	AC
SC7001	QSOCN0267FJ00	J	Socket, 18-pin(EA)	AF
RDA201	PRDAR0031SEFW	J	Heat Sink, for IC201	AE
RDA410	PRDAR0005SEFW	J	Heat Sink, for IC410	AC
RDA3601	PRDAR0060SEFW	J	Heat Sink, for IC3601	AK
TP15	QLUGP0111GEFW	J	Lug, Test Point	AA
	LX-BZ3100CEFD	J	Screw	AA

PWB-B: DUNTKA592WEF0
CRT UNIT

INTEGRATED CIRCUIT

Ref. No.	Part No.	★	Description	Code
IC850	VHiTDA6103Q-1	J	TDA6103Q/N3	AL

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q850	VS2SA1266-Y-1	J	A1266-Y	AA
Q851	VS2SC3198-Y-1	J	C3198-Y	AA
Q1504	VS2SC3198-Y-1	J	C3199-Y	AA
Q1505	VS2SA1266-Y-1	J	A1266-Y	AA
Q1506	VS2SA1930++-1	J	A1930++	AD
Q1507	VS2SC5171++-1	J	C5171++	AD

DIODES

Ref. No.	Part No.	★	Description	Code
D853	RH-EX0647GEZZ	J	Zener Diode, 15V	AA
D854	VHD1SS119//-1	J	Diode	AB
D855	VHD1SS119//-1	J	Diode	AB
D859	VHD1SS119//-1	J	Diode	AB
D1502	VHD1SS119//-1	J	Diode	AB
D1503	VHD1SS119//-1	J	Diode	AB
D1506	RH-DX0487CEZZ	J	Diode	AC
D1507	RH-DX0487CEZZ	J	Diode	AC
D1510	VHD1SS119//-1	J	Diode	AB
D1515	RH-EX0400GEZZ	J	Zener Diode, 11V	AA
D1518	RH-EX0400GEZZ	J	Zener Diode, 11V	AA

CAPACITORS

[EL.···Electrolytic]

Ref. No.	Part No.	★				Code
C850	VCFYSB2EB823J	J	0.082	250V	Mylar	AD
C851	RC-KZ0150CEZZ or RC-KZ0153CEZZ	J	1000p	3kV	Ceramic	AB
C852	VCEA0A1CW227M	J	220	16V	EL.	AC
C853	VCEA0A1CW106M	J	10	16V	EL.	AB
C854	VCEA0A1CW227M	J	220	16V	EL.	AC
C855	VCEA0V2EW106M	J	10	250V	EL.	AD
C856	VCEA0A1CW476M	J	47	16V	EL.	AB
C1501	VCEA0A1CW476M	J	47	16V	EL.	AB
C1506	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C1508	VCKYPA2HB472K	J	4700p	500V	Ceramic	AB
C1509	VCKYPA1HB472K	J	4700p	50V	Ceramic	AA
C1510	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C1511	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C1515	VCEA0A1CW476M	J	47	16V	EL.	AB
C1516	VCEA0A1CW476M	J	47	16V	EL.	AB
C1517	VCEA0A2AW106M	J	10	100V	EL.	AC
C1518	VCCSPA2HL560K	J	56p	500V	Ceramic	AA
C1519	VCEA4A2CN106M	J	10	160V	EL.	AC

RESISTORS

[M-Ox.···Metal Oxide]

Ref. No.	Part No.	★				Code
R850	VRS-SV2HC152J	J	1.5k	1/2W	M-Ox.	AA
R851	VRS-SV2HC152J	J	1.5k	1/2W	M-Ox.	AA
R852	VRS-SV2HC152J	J	1.5k	1/2W	M-Ox.	AA
R853	VRS-SV2HC272J	J	2.7k	1/2W	M-Ox.	AA
R854	VRS-SV2HC272J	J	2.7k	1/2W	M-Ox.	AA
R855	VRS-SV2HC272J	J	2.7k	1/2W	M-Ox.	AA
R856	VRD-RA2HD224J	J	220k	1/2W	Carbon	AA
R857	VRD-RA2HD224J	J	220k	1/2W	Carbon	AA
R858	VRD-RA2HD224J	J	220k	1/2W	Carbon	AA
R862	VRC-MA2HG152K	J	1.5k	1/2W	Solid	AA
R863	VRC-MA2HG152K	J	1.5k	1/2W	Solid	AA
R864	VRC-MA2HG152K	J	1.5k	1/2W	Solid	AA
R867	VRS-SV2HC392J	J	3.9k	1/2W	M-Ox.	AA
R869	VRD-RA2BE473J	J	47k	1/8W	Carbon	AA
R870	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R871	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R872	VRD-RA2EE680J	J	68	1/4W	Carbon	AA
R873	VRD-RA2HD224J	J	220k	1/2W	Carbon	AA
R874	VRD-RA2HD184J	J	180k	1/2W	Carbon	AA
R875	VRD-RA2HD184J	J	180k	1/2W	Carbon	AA
R876	VRD-RA2HD184J	J	180k	1/2W	Carbon	AA
R877	VRD-RA2BE104J	J	100k	1/8W	Carbon	AA
R887	VRD-RA2BE182J	J	1.8k	1/8W	Carbon	AA
R890	VRD-RA2EE100J	J	10	1/4W	Carbon	AA
R1511	VRD-RA2BE560J	J	56	1/8W	Carbon	AA
⚠ R1513	VRS-VV3DB471J	J	470	2W	M-Ox.	AA
R1514	VRD-RA2BE100J	J	10	1/8W	Carbon	AA
R1515	VRD-RA2BE820J	J	82	1/8W	Carbon	AA
R1516	VRD-RA2BE820J	J	82	1/8W	Carbon	AA
R1517	VRD-RA2BE122J	J	1.2k	1/8W	Carbon	AA
R1518	VRD-RA2BE683J	J	68k	1/8W	Carbon	AA
R1519	VRD-RA2BE123J	J	12k	1/8W	Carbon	AA
R1520	VRD-RA2BE683J	J	68k	1/8W	Carbon	AA
R1521	VRD-RA2BE122J	J	1.2k	1/8W	Carbon	AA
R1525	VRD-RA2EE560J	J	56	1/4W	Carbon	AA
R1526	VRD-RA2EE560J	J	56	1/4W	Carbon	AA
R1527	VRD-RA2EE2R7J	J	2.7	1/4W	Carbon	AA
R1528	VRD-RA2EE2R7J	J	2.7	1/4W	Carbon	AA
⚠ R1529	VRS-VV3DB221J	J	220	2W	M-Ox.	AA
R1530	VRD-RA2BE122J	J	1.2k	1/8W	Carbon	AA

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
FB850	RBLN-0037CEZZ	J	Ferrite Bead	AB
P852	QPLGN0241CEZZ	J	Plug, 2-pin(PU)	AA
P854	QPLGN0741CEZZ	J	Plug, 7-pin(N)	AC
P855	QPLGN0878GEZZ	J	Plug, 8-pin(CJ)	AC
P856	QTiPM0083CEZZ	J	Tip(K857)	AB
P858	QTiPM0083CEZZ	J	Tip(CE)	AB
SC850	QSOCV0936CEZZ	J	CRT Socket	AM
RDA850	PRDAR0041SEFW	J	Heat Sink, for IC850	AD
RDA1506	PRDAR0005SEFW	J	Heat Sink, for Q1506	AC
RDA1507	PRDAR0005SEFW	J	Heat Sink, for Q1507	AC

PWB-C: DUNTKA488FMF3
POWER UNIT

INTEGRATED CIRCUITS

Ref. No.	Part No.	★	Description	Code
IC501	VHiLA7841//-1	J	LA7841	AM
IC680	VHiUPC358C/-1	J	UPC358C	AD
⚠ IC701	VHiTEA1507/-1	J	TEA1507P/N1	AL
⚠ IC702	RH-FX0008GEZZ	J	PC123FY8	AE
IC741	VHiSE130N//-1	J	SE130N	AF

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q622	VS2SC2482//-1	J	C2482	AD
⚠ Q630	VS2SD2581//1E	J	D2581	AL
Q670	VS2SA1246//1E	J	A1246	AE
Q671	VS2SD1830//1E	J	D1830	AF
Q680	VS2SC5022//1E	J	C5022	AG
Q681	VS2SC3198-Y-1	J	C3198-Y	AA
⚠ Q701	VSSPP11N60C-1	J	SPP11N60C	AR
	or			
	VSSPA11N60C-1			
⚠ Q750	VS2SA1013//1E	J	A1013	AD
⚠ Q751	VS2SC3198-Y-1	J	C3198-Y	AA
⚠ Q752	VS2SA1266-Y-1	J	A1266-Y	AA

DIODES

Ref. No.	Part No.	★	Description	Code
D551	RH-DX0295CEZZ	J	Diode	AD
D570	RH-EX0654CEZZ	J	Zener Diode, 75V	AD
D576	RH-DX0487CEZZ	J	Diode	AC
D580	RH-EX0672GEZZ	J	Zener Diode, 30V	AB
D581	VHD1SS119//-1	J	Diode	AB
D582	RH-EX0609GEZZ	J	Zener Diode, 4.8V	AA
⚠ D631	RH-DX0514CEZZ	J	Diode	AF
⚠ D632	RH-DX0229CEZZ	J	Diode	AF
⚠ D651	RH-DX0302CEZZ	J	Diode	AC
D657	RH-DX0302CEZZ	J	Diode	AC
▲⚠ D659	RH-DX0487CEZZ	J	Diode	AC
D661	RH-DX0295CEZZ	J	Diode	AD
D664	RH-EX0630GEZZ	J	Zener Diode	AA
▲⚠ D665	RH-EX0641GEZZ	J	Zener Diode, 12V	AA
D680	RH-DX0511CEZZ	J	Diode	AE
D681	VHD1SS119//-1	J	Diode	AB
D682	VHD1SS119//-1	J	Diode	AB
D683	VHD1SS119//-1	J	Diode	AB
D684	VHD1SS119//-1	J	Diode	AB
D686	RH-DX0511CEZZ	J	Diode	AE
⚠ D701	RH-DX0485CEZZ	J	Diode	AG
D707	VHD1SS244//-1	J	Diode	AB
D708	VHD1SS244//-1	J	Diode	AB
D711	VHD1SS119//-1	J	Diode	AB
D720	RH-DX0452CEZZ	J	Diode	AH
D724	RH-DX0436CEZZ	J	Diode	AG
D726	RH-DX0473CEZZ	J	Diode	AK
D728	RH-DX0460CEZZ	J	Diode	AF
D729	RH-DX0295CEZZ	J	Diode	AD
⚠ D744	RH-EX0655GEZZ	J	Zener Diode, 20V	AB
⚠ D751	VHD1SS119//-1	J	Diode	AB
⚠ D752	VHD1SS119//-1	J	Diode	AB
⚠ D753	VHD1SS119//-1	J	Diode	AB
D756	VHD1SS119//-1	J	Diode	AB
D757	VHD1SS119//-1	J	Diode	AB
D758	VHD1SS119//-1	J	Diode	AB
⚠ D760	RH-EX0650GEZZ	J	Zener Diode, 16V	AB
⚠ D761	RH-DX0083GEZZ	J	Diode	AC
D762	RH-EX0408GEZZ	J	Zener Diode	AB
D771	RH-EX0673GEZZ	J	Zener Diode	AB
D781	RH-DX0487CEZZ	J	Diode	AC
D782	RH-EX0618GEZZ	J	Zener Diode, 6.27V	AA
D783	VHD1SS119//-1	J	Diode	AB
⚠ VA701	RH-VX0019CEZZ	J	Varistor	AC

COILS AND PACKAGED CIRCUIT

Ref. No.	Part No.	★	Description	Code
⚠ PR701	RMPTP0072CEZZ	J	Packaged Circuit	AH
L641	RCiLZ1026CEZZ	J	Coil	AK
L670	RCiLZ1053CEZZ	J	Coil	AG
L680	RCiLZ1070CEZZ	J	Coil	AH
L681	VP-XF8R2K0000	J	Peaking 8.2µH	AB
⚠ L701	RCiLF0313CEZZ	J	Coil	AH
	or			
	RCiLF0385CEZZ			
⚠ L702	RCiLF0313CEZZ	J	Coil	AH
	or			
	RCiLF0345CEZZ			
L720	RCiLP0218CEZZ	J	Coil	AD
L724	RCiLP0212CEZZ	J	Coil	AD
L726	RCiLP0219CEZZ	J	Coil	AD
⚠ L761	VP-DF220K0000	J	Peaking 22µH	AB

TRANSFORMERS

Ref. No.	Part No.	★	Description	Code
▲⚠ T602	RTRNF2058CEZZ	J	H-Volt Transformer	BE
⚠ T620	RTRNZ0731CEZZ	J	Transformer	AG
⚠ T680	RTRNZ0209PEZZ	R	Transformer	AL
⚠ T701	RTRNW0006SEZZ	J	Transformer	AQ

CAPACITORS

[EL.…Electrolytic, M-Poly.…Metalized Polypro Film]

Ref. No.	Part No.	★				Code
C525	VCKYPA1HB391K	J	390p	50V	Ceramic	AA
C526	VCKYPA1HB391K	J	390p	50V	Ceramic	AA
C551	RC-FZ0272CEZZ	J	0.39	100V	M-Poly.	AD
C552	VCCSPA2HL220K	J	22p	500V	Ceramic	AA
C553	VCEA4A1HN107M	J	100	50V	EL.	AC
C558	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C560	VCKYPA1HB102K	J	1000p	50V	Ceramic	AA
C561	VCFYFA1HA563J	J	0.056	50V	Mylar	AA
C572	VCEA0A1VW227M	J	220	35V	EL.	AC
C576	VCKYPA2HB102K	J	1000p	500V	Ceramic	AA
C625	VCKYPA2HB561K	J	560p	500V	Ceramic	AA
C627	VCKYPA1HB102K	J	1000p	50V	Ceramic	AA
C628	VCQYTA2AA563K	J	0.056	100V	Mylar	AB
▲⚠ C632	VCFPVC3CA822H	J	8200p	1.6kV	M-Poly.	AE
▲⚠ C633	VCFPVC3CA812H	J	8100p	1.6kV	M-Poly.	AD
⚠ C636	VCQPPC2JB223J	J	0.022	630V	Polypro	AC
C638	VCKYPA1HB472K	J	4700p	50V	Ceramic	AA
C639	RC-KZ0033CEZZ	J	330p	2kV	Ceramic	AB
C644	RC-FZ0358CEZZ	J	0.36	250V	M-Poly.	AF
C651	VCKYPA2HB102K	J	1000p	500V	Ceramic	AA
⚠ C652	VCEA0A2EW106M	J	10	250V	EL.	AD
C657	VCKYPA2HB102K	J	1000p	500V	Ceramic	AA
C658	VCEA0V1EW108M	J	1000	25V	EL.	AD
▲⚠ C659	VCEA0A1VW107M	J	100	35V	EL.	AC
C661	VCKYPA2HB102K	J	1000p	500V	Ceramic	AA
C662	VCEA0V1EW108M	J	1000	25V	EL.	AD
C670	RC-FZ0374CEZZ	J	4.7	100V	Polypro	AF
C680	VCFPVC3CA822H	J	8200p	1.6kV	M-Poly.	AE
C681	RC-KZ0024CEZZ	J	0.001	2kV	Ceramic	AC
⚠ C682	RC-KZ0149CEZZ	J	390p	3150V	Ceramic	AE
C683	VCE9GA1HW335M	J	3.3	50V	EL. (N.P)	AB
C684	VCEA0A1HW106M	J	10	50V	EL.	AB
C695	VCFYFA1HA224J	J	0.22	50V	Mylar	AB
⚠ C701	RC-FZ037SCEZZ	J	0.22	250V	M-Poly.	AD
	or					
	RC-FZ029SCEZZ					
	or					
	RC-FZ012SGEZZ					
⚠ C702	RC-KZ0084GEZZ	J	150p	250V	Ceramic	AC
⚠ C703	RC-KZ0084GEZZ	J	150p	250V	Ceramic	AC
⚠ C704	RC-KZ0016CEZZ	J	0.01	250V	Ceramic	AC
⚠ C705	RC-KZ0016CEZZ	J	0.01	250V	Ceramic	AC
C707	RC-EZ0722CEZZ	J	820	200V	EL.	AR
⚠ C717	RC-KZ0093GEZZ	J	4700p	250V	Ceramic	AD
⚠ C718	RC-KZ0093GEZZ	J	4700p	250V	Ceramic	AD
C720	RC-EZ0535CEZZ	J	330	160V	EL.	AH
C722	RC-EZ0724CEZZ	J	100	160V	EL.	AG
C724	RC-EZ0739CEZZ	J	1000	16V	EL.	AD
C725	VCEA0A1CW107M	J	100	16V	EL.	AC
C726	RC-EZ0746CEZZ	J	680	25V	EL.	AD
C727	VCEA0A1VW107M	J	100	35V	EL.	AC
C728	RC-EZ1115CEZZ	J	1000	35V	EL.	AE
C729	VCE9GA1HW105M	J	1.0	50V	EL. (N.P)	AB
C731	VCEA0A1EW337M	J	330	25V	EL.	AC

PWB-C: DUNTKA488FMF3

POWER UNIT (Continued)

Ref. No.	Part No.	★			Description	Code
C732	RC-KZ0296CEZZ	J	470p	2kV	Ceramic	AC
C737	VCEA0A1EW226M	J	22	25V	EL.	AB
C738	VCFPVC3CA222H	J	2200p	1.6kV	M-Poly.	AE
C740	VCEA0A1EW476M	J	47	25V	EL.	AB
C741	VCEA0A2AW105M	J	1.0	100V	EL.	AB
C744	VCKYPH3DB561K or RC-KZ0038CEZZ	J	560p	2kV	Ceramic	AC
C745	RC-KZ0040CEZZ	J	820p	2kV	Ceramic	AD
C746	VCKYPH3DB561K or RC-KZ0038CEZZ	J	560p	2kV	Ceramic	AC
C749	VCKYPH3DB561K or RC-KZ0038CEZZ	J	560p	2kV	Ceramic	AC
C750	VCEA0A1CW227M	J	220	16V	EL.	AC
C751	VCEA0A1EW476M	J	47	25V	EL.	AB
C761	VCEA0A2DW475M	J	4.7	200V	EL.	AD
⚠ C762	VCEA0A1CW337M	J	330	16V	EL.	AC
⚠ C764	VCEA0A1CW337M	J	330	16V	EL.	AC
C771	VCEA0A1HW106M	J	10	50V	EL.	AB
⚠ C780	RC-KZ020SCEZZ	J	2200p	4kV	Ceramic	AE
C781	VCQYTA1HM103K	J	0.01	50V	Mylar	AB
C782	VCKYPA1HB102K	J	1000p	50V	Ceramic	AA
C783	VCQYTA1HM103K	J	0.01	50V	Mylar	AB
C784	VCEA0A1EW107M	J	100	25V	EL.	AC

RESISTORS

[M-Ox.···Metal Oxide, M-Film···Metal Film]

R412	VRD-RA2EE683J	J	68k	1/4W	Carbon	AA
R413	VRD-RA2EE684J	J	680k	1/4W	Carbon	AA
⚠ R414	VRS-VV3AB103J	J	10k	1W	M-Ox.	AA
R550	VRD-RA2BE105J	J	1.0M	1/8W	Carbon	AA
R551	VRD-RA2BE1R0J	J	1.0	1/8W	Carbon	AA
R553	VRN-RA2BK153F	J	15k	1/8W	M-Film	AA
R554	VRN-RA2BK123F	J	12k	1/8W	M-Film	AA
R555	VRN-VV3DB1R2J	J	1.2	2W	M-Film	AA
R556	VRD-RA2BE394J	J	390k	1/8W	Carbon	AA
R557	VRD-RA2BE683J	J	68k	1/8W	Carbon	AA
R558	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R559	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R561	VRN-RA2BK272F	J	2.7k	1/8W	M-Film	AA
R562	VRN-RA2BK223F	J	22k	1/8W	M-Film	AB
R563	VRN-RA2BK153F	J	15k	1/8W	M-Film	AA
R565	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R571	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R575	VRS-VV3DB151J	J	150	2W	M-Ox.	AA
R576	VRN-GA2EB1R0J	J	1.0	1/4W	M-Film	AA
R580	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R581	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R624	VRS-KA3HG222J	J	2.2k	5W	M-Ox.	AD
R625	VRS-VV3AB562J	J	5.6k	1W	M-Ox.	AA
R626	VRD-RA2BE151J	J	150	1/8W	Carbon	AA
R627	VRD-RA2BE221J	J	220	1/8W	Carbon	AA
⚠ R629	VRW-KQ3NC3R3K	J	3.3	7W	Cement	AE
R630	VRD-RA2HD274J	J	270k	1/2W	Carbon	AA
R638	VRD-RA2HD150J	J	15	1/2W	Carbon	AA
R647	VRS-KT3LB122J	J	1.2k	3W	M-Ox.	AC
⚠ R651	VRN-VV3AB5R6J	J	5.6	1W	M-Film	AA
R657	VRN-VV3ABR22J	J	0.22	1W	M-Film	AA
⚠ R659	VRN-VV3DB1R2J	J	1.2	2W	M-Film	AA
▲⚠ R660	VRN-GA2EB1R0J	J	1.0	1/4W	M-Film	AA
R661	VRN-SV2HCR22J	J	0.22	1/2W	M-Film	AB
R664	VRD-RA2HD392J	J	3.9k	1/2W	Carbon	AA
▲⚠ R665	VRD-RA2EE392G	J	3.9k	1/4W	Carbon	AB
▲⚠ R666	VRD-RA2EE332G	J	3.3k	1/4W	Carbon	AB
▲⚠ R667	VRD-RA2BE333J	J	33k	1/8W	Carbon	AA
R670	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R671	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R672	VRD-RA2BE472J	J	4.7k	1/8W	Carbon	AA
R673	VRD-RA2BE822J	J	8.2k	1/8W	Carbon	AA
R674	VRD-RA2HD182J	J	1.8k	1/2W	Carbon	AA
⚠ R675	VRN-VV3LBR27J	J	0.27	3W	M-Film	AC
R680	VRS-SV3LB154J	J	150k	3W	M-Ox.	AC
R681	VRS-VV3LB104J	J	100k	3W	M-Ox.	AB
R682	VRC-MA2HG333K	J	33k	1/2W	Solid	AA
R683	VRD-RA2BE332J	J	3.3k	1/8W	Carbon	AA
R684	VRD-RA2BE681J	J	680	1/8W	Carbon	AA
R685	VRS-VV3AB181J	J	180	1W	M-Ox.	AA
R686	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R687	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R688	VRD-RA2BE473J	J	47k	1/8W	Carbon	AA
R689	VRD-RA2BE823J	J	82k	1/8W	Carbon	AA
R690	VRD-RA2BE822J	J	8.2k	1/8W	Carbon	AA
R691	VRD-RA2BE683J	J	68k	1/8W	Carbon	AA
R695	VRD-RA2BE224J	J	220k	1/8W	Carbon	AA
⚠ R701	VRW-KQ41C1R2K	J	1.2	15W	Cement	AD
⚠ R702	VRS-VV3LB101J	J	100	3W	M-Ox.	AB
R705	VRN-VV3DBR15J	J	0.15	2W	M-Film	AB
R706	VRN-VV3DBR15J	J	0.15	2W	M-Film	AB
R707	VRD-RA2HD270J	J	27	1/2W	Carbon	AA
R708	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R709	VRD-RA2BE393J	J	39k	1/8W	Carbon	AA
R710	VRS-SV2HC102J	J	1.0k	1/2W	M-Ox.	AA
R711	VRD-RA2BE394J	J	390k	1/8W	Carbon	AA
R712	VRD-RA2BE100J	J	10	1/8W	Carbon	AA
R713	VRS-SV2HC122J	J	1.2k	1/2W	M-Ox.	AA
R715	VRD-RA2BE150J	J	15	1/8W	Carbon	AA
R716	VRD-RA2BE684J	J	680k	1/8W	Carbon	AA
⚠ R717	RR-DZ0049CEZZ	J	3.9M	1/2W		AB
R720	VRD-RA2HD683J	J	68k	1/2W	Carbon	AA
R724	VRD-RA2HD561J	J	560	1/2W	Carbon	AA
R726	VRN-VV3ABR10J	J	0.1	1W	M-Film	AB
R727	VRD-RA2HD122J	J	1.2k	1/2W	Carbon	AA
R728	VRN-VV3ABR10J	J	0.1	1W	M-Film	AB
R741	VRD-RA2EE102J	J	1.0k	1/4W	Carbon	AA
R742	VRD-RA2BE182J	J	1.8k	1/8W	Carbon	AA
R743	VRD-RA2HD470J	J	47	1/2W	Carbon	AA
⚠ R750	VRS-SV2HC820J	J	82	1/2W	M-Ox.	AA
⚠ R751	VRS-SV2HC102J	J	1.0k	1/2W	M-Ox.	AA
R752	VRD-RA2EE102J	J	1.0k	1/4W	Carbon	AA
⚠ R753	VRD-RA2HD224J	J	220k	1/2W	Carbon	AA
⚠ R754	VRD-RA2BE183J	J	18k	1/8W	Carbon	AA
⚠ R755	VRD-RA2BE221J	J	220	1/8W	Carbon	AA
▲⚠ R756	VRD-RA2EE122G	J	1.2k	1/4W	Carbon	AA
⚠ R757	VRD-RA2BE182J	J	1.8k	1/8W	Carbon	AA
⚠ R758	VRD-RA2BE563J	J	56k	1/8W	Carbon	AA
R759	VRD-RA2HD102J	J	1.0k	1/2W	Carbon	AA
⚠ R761	VRS-VV3DB100J	J	10	2W	M-Ox.	AA
⚠ R763	VRN-SV2HCR82J	J	0.82	1/2W	M-Film	AA
⚠ R764	VRD-RA2HD1R5J	J	1.5	1/2W	Carbon	AA
R765	VRD-RA2BE220J	J	22	1/8W	Carbon	AA
R768	VRS-SV2HC100J	J	10	1/2W	M-Ox.	AA
R770	VRS-VV3DB123J	J	12k	2W	M-Ox.	AA
⚠ R771	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R781	VRN-GA2EB1R0J	J	1.0	1/4W	M-Film	AA
R782	VRD-RA2BE222J	J	2.2k	1/8W	Carbon	AA
R783	VRD-RA2BE562J	J	5.6k	1/8W	Carbon	AA
R784	VRD-RA2BE122J	J	1.2k	1/8W	Carbon	AA

MISCELLANEOUS PARTS

⚠ UNT703	RUNTK0682CEZZ	J	Unit	AR
⚠ RY701	RRLYJ0095CEZZ	J	Relay	AF
⚠ F701	QFS-B6319CEZZ	J	Fuse, 6.3A-125V	AG
FB630	RBLN-0047CEZZ	J	Ferrite Bead	AB
FB631	RBLN-0047CEZZ	J	Ferrite Bead	AB
FB720	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB728	RBLN-0020CEZZ	J	Ferrite Bead	AB
FB730	RBLN-0037CEZZ	J	Ferrite Bead	AB
FB1552	RBLN-0037CEZZ	J	Ferrite Bead	AB
FH1	QFSHD1013CEZZ	J	Fuse Holder	AC
FH2	QFSHD1014CEZZ	J	Fuse Holder	AC
P501	QPLGN0160FJZZ	J	Plug, 5-pin(K)	AD
P600	QPLGN0341CEZZ	J	Plug, 3-pin	AA
P650	QPLGN0741CEZZ	J	Plug, 7-pin(N)	AC
P702	QPLGN0404CEZZ	J	Plug, 4-pin(M)	AB

Ref. No.	Part No.	★	Description	Code
SC712	QSOCZ1040CEZZ	J	Socket, 10-pin(EH)	AD
SC713	QSOCZ1394GEZZ	J	Socket, 13-pin(R)	AD
SC714	QSOCZ1040CEZZ	J	Socket, 10-pin(EV)	AD
RDA501	PRDAR0045SEFW	J	Heat Sink, for IC501	AF
RDA630	PRDAR0044SEFW	J	Heat Sink, for Q630	AF
RDA671	PRDAR0033SEFW	J	Heat Sink, for Q671	AF
RDA680	PRDAR0043SEFW	J	Heat Sink, for Q680	AC
RDA701	PRDAR0031SEFW	J	Heat Sink, for Q701	AE
RDA702	PRDAR0012SEFW	J	Heat Sink, for D701	AD
RDA720	PRDAR0005SEFW	J	Heat Sink, for D720	AC
⚠ SG680	QSPGH0025CEZZ	J	Spark Gap	AC
⚠ SG681	QSPGH0025CEZZ	J	Spark Gap	AC
	LHLDW1063SEKZ	J	Holder	AB
	LX-BZ0086TAFD	J	Screw	AA
	LX-BZ3049GEFD	J	Screw	AA
	LX-BZ3100CEFD	J	Screw	AA
	LX-TZ3004CEFD	J	Screw	AA

PWB-C: DUNTKA488FMF3
POWER UNIT (Continued)

PWB-E: DUNTKA591WEF0
MTS MODULE UNIT

INTEGRATED CIRCUIT

Ref. No.	Part No.	★	Description	Code
IC3001	VHiCXA2074Q-1	J	CXA2074Q	AY

TRANSISTORS

Ref. No.	Part No.	★	Description	Code
Q3001	VS2SC3928AR-1	J	2SC3928AR	AB
Q3002	VS2SC3928AR-1	J	2SC3928AR	AB
Q3003	VS2SC3928AR-1	J	2SC3928AR	AB
Q3004	VS2SC3928AR-1	J	2SC3928AR	AB

CAPACITORS

[EL.···Electrolytic]

Ref. No.	Part No.	★				Code
C3001	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB
C3002	VCKYCY1HB562K	J	5600p	50V	Ceramic	AA
C3003	VCQYTA1HM123K	J	0.012	50V	Mylar	AA
C3004	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3005	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB
C3006	VCEA0A1HW106M	J	10	50V	EL.	AB
C3007	VCEA0A1HW475M	J	4.7	50V	EL.	AB
C3008	VCKYCY1HF103Z	J	0.01	50V	Ceramic	AA
C3009	VCEA0A1CW227M	J	220	16V	EL.	AC
C3010	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB
C3011	VCEA0A1HW475M	J	4.7	50V	EL.	AB
C3012	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB
C3013	VCKYCY1HB272K	J	2700p	50V	Ceramic	AA
C3014	VCQYTA1HM473K	J	0.047	50V	Mylar	AB
C3015	VCEACA1HC335K	J	3.3	50V	EL.	AC
C3016	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB
C3017	VCEACA1CC106K	J	10	16V	EL.	AC
C3018	VCEA0A1HW105M	J	1.0	50V	EL.	AB
C3029	VCKYCY1HB682K	J	6800p	50V	Ceramic	AA
C3030	VCKYCY1HB682K	J	6800p	50V	Ceramic	AA
C3031	VCKYCY1CB473K	J	0.047	16V	Ceramic	AA
C3032	VCKYCY1CB473K	J	0.047	16V	Ceramic	AA
C3034	VCE9GA1HW335M	J	3.3	50V	EL. (N.P)	AB
C3035	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C3037	VCE9GA1HW335M	J	3.3	50V	EL. (N.P)	AB
C3038	VCKYCY1HB681K	J	680p	50V	Ceramic	AA
C3039	VCEA0A1CW337M	J	330	16V	EL.	AC
C3041	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB
C3042	VCE9GA1HW475M	J	4.7	50V	EL. (N.P)	AB

RESISTORS

[M-Ox.···Metal Oxide]

Ref. No.	Part No.	★				Code
RJ1	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ2	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ3	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ4	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ5	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ6	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ7	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ8	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ9	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ10	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ11	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ12	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
RJ13	VRS-CY1JF000J	J	0	1/16W	M-Ox.	AA
R3001	VRS-CY1JF221J	J	220	1/16W	M-Ox.	AA
R3002	VRS-CY1JF221J	J	220	1/16W	M-Ox.	AA
R3003	VRS-CY1JF105J	J	1.0M	1/16W	M-Ox.	AA
R3004	VRS-CY1JF104J	J	100k	1/16W	M-Ox.	AA
R3006	VRS-CY1JF623J	J	62k	1/16W	M-Ox.	AA
R3007	VRS-CY1JF332J	J	3.3k	1/16W	M-Ox.	AA
R3008	VRS-CY1JF302J	J	3.0k	1/16W	M-Ox.	AA
R3010	VRS-CY1JF392J	J	3.9k	1/16W	M-Ox.	AA
R3013	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3017	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3018	VRS-CY1JF101J	J	100	1/16W	M-Ox.	AA
R3021	VRS-CY1JF183J	J	18k	1/16W	M-Ox.	AA
R3022	VRS-CY1JF683J	J	68k	1/16W	M-Ox.	AA
R3023	VRS-CY1JF183J	J	18k	1/16W	M-Ox.	AA
R3024	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA

Ref. No.	Part No.	★	Description	Code

PWB-E: DUNTKA591WEF0
MTS MODULE UNIT (Continued)

R3025	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R3026	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3027	VRS-CY1JF183J	J	18k	1/16W	M-Ox.	AA
R3028	VRS-CY1JF683J	J	68k	1/16W	M-Ox.	AA
R3029	VRS-CY1JF183J	J	18k	1/16W	M-Ox.	AA
R3030	VRS-CY1JF472J	J	4.7k	1/16W	M-Ox.	AA
R3031	VRS-CY1JF152J	J	1.5k	1/16W	M-Ox.	AA
R3032	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3033	VRS-CY1JF331J	J	330	1/16W	M-Ox.	AA
R3041	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3042	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA
R3109	VRS-CY1JF102J	J	1.0k	1/16W	M-Ox.	AA

MISCELLANEOUS PARTS

P7001	QPLGN0250FJ00	J	Plug, 18-pin(EA)	AE

Ref. No.	Part No.	★	Description	Code

PWB-F: DUNTKA489FMF3
CONTROL UNIT

TRANSISTOR

Q3480	VS2SC3198-Y-1	J	C3198-Y	AA

DIODES

D3408	VHD1SS119//-1	J	Diode	AB
D3411	VHD1SS119//-1	J	Diode	AB

CAPACITORS

[EL.··· Electrolytic]

C3401	VCEA0A0JW107M	J	100	6.3V	EL.	AB
C3451	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C3452	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C3453	VCQYTA1HM104J	J	0.1	50V	Mylar	AA
C3457	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA
C3458	VCKYPA1HF103Z	J	0.01	50V	Ceramic	AA

RESISTORS

R3410	VRD-RA2BE100J	J	10	1/8W	Carbon	AA
R3411	VRD-RA2BE561J	J	560	1/8W	Carbon	AA
R3450	VRD-RA2BE123J	J	12k	1/8W	Carbon	AA
R3451	VRD-RA2BE563J	J	56k	1/8W	Carbon	AA
R3452	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R3453	VRD-RA2BE273J	J	27k	1/8W	Carbon	AA
R3454	VRD-RA2BE563J	J	56k	1/8W	Carbon	AA
R3458	VRD-RA2BE103J	J	10k	1/8W	Carbon	AA
R3459	VRD-RA2BE274J	J	270k	1/8W	Carbon	AA
R3460	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R3461	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R3462	VRD-RA2BE750J	J	75	1/8W	Carbon	AA
R3463	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3464	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3481	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R3482	VRD-RA2BE223J	J	22k	1/8W	Carbon	AA
R3483	VRD-RA2BE473J	J	47k	1/8W	Carbon	AA
R3484	VRD-RA2BE473J	J	47k	1/8W	Carbon	AA
R3485	VRD-RA2BE224J	J	220k	1/8W	Carbon	AA
R3486	VRD-RA2BE102J	J	1.0k	1/8W	Carbon	AA
R3487	VRD-RA2BE272J	J	2.7k	1/8W	Carbon	AA
R3488	VRD-RA2BE153J	J	15k	1/8W	Carbon	AA

SWITCHES

S3401	QSW-P0620CEZZ	J	POWER	AF
S3452	QSW-K0079GEZZ	J	MENU	AB
S3453	QSW-K0079GEZZ	J	CH(–)	AB
S3454	QSW-K0079GEZZ	J	CH(+)	AB
S3455	QSW-K0079GEZZ	J	VOL(▲)	AB
S3456	QSW-K0079GEZZ	J	VOL(▼)	AB

MISCELLANEOUS PARTS

J3451	QJAKZ0102PEZZ	R	Jack AV-IN2	AH
P3451	QPLGN0441CEZZ	J	Plug, 4-pin(SH)	AB
P3452	QPLGN0541CEZZ	J	Plug, 5-pin(SG)	AB
SC3453	QSOCN1195REZZ	J	Socket, 11-pin(RE)	AC
SC3454	QSOCN1195REZZ	J	Socket, 11-pin(VB)	AC
RMC3401	RRMCU0253CEZZ or RRMCU0227CEZZ or RRMCU0222CEZZ	J	R/C Receiver	AG

MISCELLANEOUS PARTS

Ref. No.	Part No.	★	Description	Code
⚠	QACCD3064CESA	J	AC Cord	AM
	QCNW-0194SEZZ	J	Connecting Cord	AD
	QCNW-0211SEZZ	J	Connecting Cord	AF
	QCNW-0212SEZZ	J	Connecting Cord	AF
	QCNW-0213SEZZ	J	Connecting Cord	AE
	QCNW-0214SEZZ	J	Connecting Cord	AG
	LHLDW1067SEKZ	J	AC Cord Holder	AC
	LX-BZ3100CEFD	J	Screw	AA
	LHLDK0022SEZZ	J	Holder	AB
	LHLDZ0001SEKZ	J	Holder	AC
	TCAUH0002SEZZ	J	Caution Card	AB
	TLABM0171SEZZ	J	Model Label	AC
	TLABR0001SEZZ	J	Label	AB
	TLABV0003SEZZ	J	Serial No. Label	AB
	TLABZ0111SEZZ	J	Production Label	AC
	LCHSM0033SEK0	J	Chassis Frame	AP
SP1	VSP0010PB338A	J	Speaker(L)	AQ
SP2	VSP0010PB338A	J	Speaker(R)	AQ

SUPPLIED ACCESSORIES

Ref. No.	Part No.	★	Description	Code
	TGAN-0025SEZZ	J	Guarantee Card	AD
	TiNS-0081SEZZ	J	Operation Manual	AF
	RRMCG1626CESB	J	Infrared R/C Unit	AY

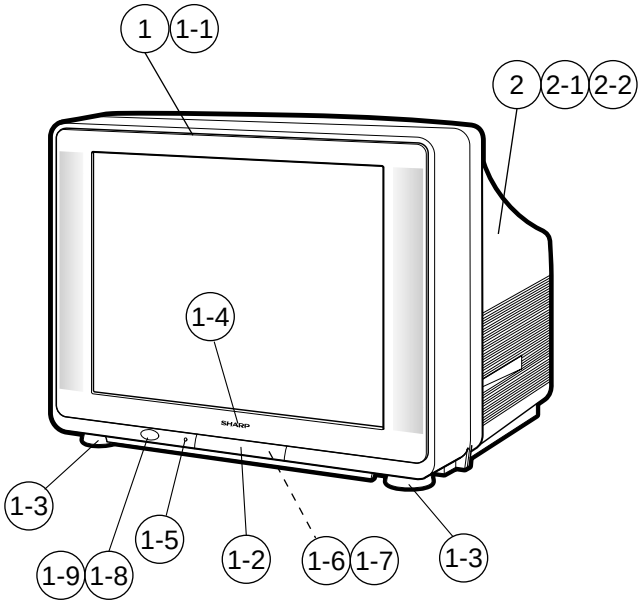
PACKING PARTS
(NOT REPLACEMENT ITEM)

Part No.		Description	Code
SPAKC0179SEZZ	–	Packing Case	—
SPAKP0004SEZZ	–	Wrapping Paper	—
SPAKP0108SEZZ	–	Wrapping Paper	—
SPAKX0121SEZZ	–	Buffer Material	—
SSAKA0001SEZZ	–	Polyethylene Bag	—
SSAKH0001SEZZ	–	Polyethylene Bag	—

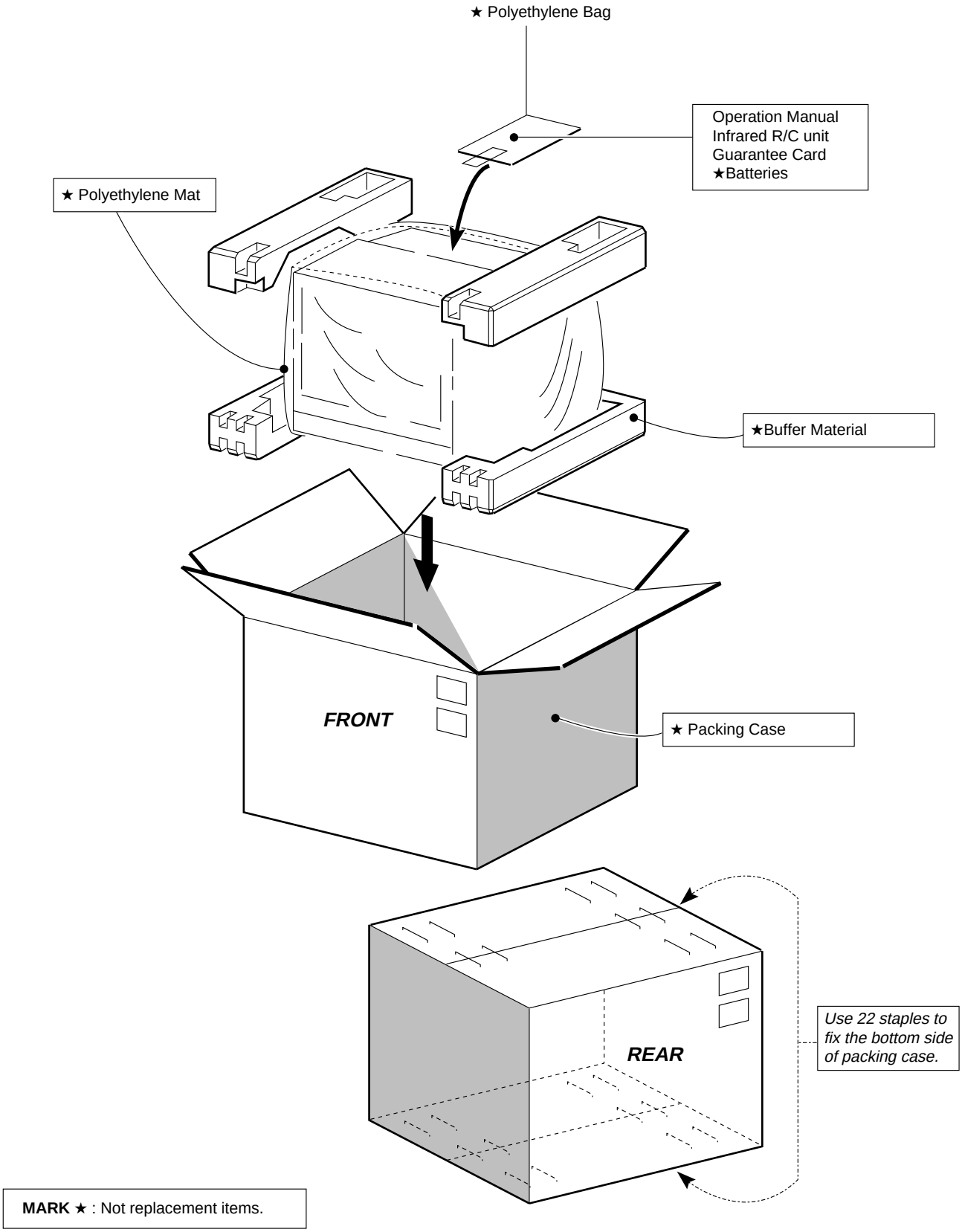
CABINET PARTS

Ref. No.	Part No.	★	Description	Code
1	CCABA0069SEF0	J	Front Cabinet Ass'y	BP
1-1	*Not Available*	–	Front Cabinet	—
1-2	GDORF0032SESA	J	Door	AF
1-3	GLEGP0001SESA	J	Foot	AE
1-4	HBDGB3141CESA	J	Badge, "SHARP"	AG
1-5	HDECQ0037SESA	J	Cover, R/C Receiver	AE
1-6	HiNDP0049SESA	J	Indication Plate	AD
1-7	PKAi-0001SE00	J	Door Latch	AF
1-8	JBTN-0035SESA	J	Power Button	AE
1-9	MSPRC0002SEFW	J	Spring, for Power Button	AC
2	CCABB0038SEF0	J	Rear Cabinet Ass'y	BE
2-1	*Not Available*	–	Rear Cabinet	—
2-2	HiNDP0050SESA	J	Indication Plate (Rear)	AG

CABINET PARTS LOCATION



PACKING OF THE SET



MARK ★ : Not replacement items.

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